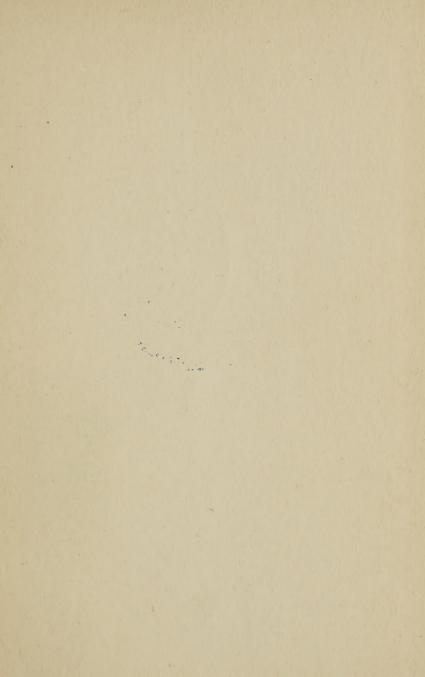
EVOLUTION AND RELIGION

JABEZ T. SUNDERLAND



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OCT 15 1925

EVOLUTION AND RELIGION

BY

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AUTHOR OF "THE ORIGIN AND CHARACTER OF THE BIBLE," ETC.

With an Introduction by

DAVID STARR JORDAN

"That was not first which was spiritual, but that which is natural; and afterward that which is spiritual."—Paul

"I, too, rest in faith. That man's perfection is the crowning flower, toward which the urgent sap in life's great tree is pressing."—George Eliot.

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"No more sublime conception of God has ever been presented to the mind of man than that which is furnished by Evolution, when it represents him as revealing himself through countless ages in the development of the earth as an abode for man, and in the age-long inbreathing of life into its constituent matter, culminating in man with his spiritual nature and all his God-like powers."—Professor Robert A. Millikan.

"A Scientist Confesses his Faith" (1923), p. 27.



PREFACE

THIS book has two very simple and practical objects in view. One is, to make clear, if it may, within a brief compass, the main reasons why the scientists of the world, with scarcely any exceptions, accept the doctrine of Evolution as true.

The other is, to state as candidly and clearly as possible the author's reasons (which certainly coincide with those of very many other persons) for regarding Evolution as not an Enemy, but, when rightly understood, a Friend and Ally of Religion.

As stated by Dr. Jordan in his Introduction which follows, the book in its first form was written several years ago, and published under the not very accurate and rather confusing title, "The Spark in the Clod." At that time there was not much public discussion of the truth of Evolution—it being generally believed, by scientists at least, that the question had been settled once for all and that the intelligence of the world had accepted the doctrine with essentially the same unanimity

as it had accepted gravitation and the sphericity of the earth.

Nor was there much public discussion of the Relation of Evolution to Religion. The old battle waged against Evolution from a theological standpoint, on the ground that it was atheistical and destroyed religion and the Bible, which was waged with such fury for twenty years and more after the appearance of Darwin's "Origin of Species" and "Descent of Man," had died away, and it was widely believed among liberal religious thinkers as well as among scientists, that it would never be revived.

But two or three years ago the whole country was suddenly startled to find that the old battle was on once more, and with hardly less intensity than in the days of Darwin, Huxley, and Spencer. And to-day there seems to be no waning of the struggle or sign of truce. On the contrary, great Christian denominations are making belief or non-belief in Evolution a test of religious fellowship, and the matter threatens permanently to divide churches. Most surprising of all, and perhaps most to be regretted, it is being widely made an educational and political question. State Legislatures are actually by legal entactment forbidding the teaching of

Evolution in all state-aided schools and colleges—something which five years ago would have been unthinkable.

As already intimated, the ground of the opposition to Evolution is mainly religious. The old claim of forty or fifty years ago is revived with fervid excitement, that it contradicts the Bible account of the origin of the world and of man, and therefore destroys belief in God and overthrows religion. Thus we have the amazing spectacle, not only of both religion and science being dragged into the arena of politics, but actually of legislatures setting themselves up as judges of what is and what is not true science, and of what is and what is not true religion.

It is in view of this very serious condition of things, and with the hope of contributing a little to a true understanding of the iss es involved, that a new, revised, and enlarged edition of the present book is offered to the public. It is believed that it is in the highest degree timely. All the questions that are now attracting public attention, both as to the truth of Evolution, and as to its relation to Religion, are discussed in the light of the fullest obtainable knowledge, and it is believed in a spirit of absolute fairness and candor.

Much additional value is given to the book by the illuminating Introduction written by the eminent scientist, Dr. David Starr Jordan, President-Emeritus of Leland Stanford University, and by the three important Appendices, the first giving a condensed summary of the forces arrayed against Evolution, and the others containing significant Testimonies regarding the truth of Evolution and its real relation to Religion.

An extended Bibliography has also been added, which will inform persons desiring further knowledge, where to find the most authoritative and the latest works bearing on all points discussed in these pages.

J. T. SUNDERLAND.

New York, September, 1925

INTRODUCTION BY DAVID STARR JORDAN

Dr. Sunderland's series of Essays on Religion and its relation to Organic Evolution was first published under the poetical title of "The Spark in the Clod." The volume is now reissued with some revision, with important additions, with an adequate and excellent Bibliography, and under a title more simply and truly descriptive of the author's purpose. This purpose is to show that between what men have found out of the Universe and its Creator, through long research with instruments of precision, cannot be at variance with the emotions in the human mind in contemplation of the same facts and forces; that is to say, cannot be at variance with true religion.

Science deals with objective facts, and by its own methods, methods which are the source of all knowledge, human experience tested and set in order: each detail verified through instruments and methods of preci-

sion, the facts ascertained being then placed in rational relation. These become truth to us, when made intelligible, that is, stated in terms of our own experience.

Science deals with what men have found out, not with what they think out, nor with what they dream or fancy, nor again with ideas they have inherited from times when tradition was subject to no means of correction. The word Evolution, borrowed from philosophy, means in Science, Orderly Change. We see with our own eves that all objects within our ken are always changing. and that all change is throughout orderly. To recognize order in the Universe marks the advance from Paganism to Science. In the Universe of which we are part, using Huxley's words, "Nothing endures save the flow of energy and the rational intelligence which pervades it." This "Intelligence" we may not define nor describe, for that would be to circumscribe the Infinite. But no student of Science can doubt its reality, and in centuries of belief in little vengeful, and scheming gods, scientific men are forced into the position of defenders of the faith, as against the limitations of certain types of mind who can visualize only gods made in their own image.

As everything we know is in a state of Orderly Change, Evolution is but another name for Nature, as Dr. Vernon Kellogg has lately pointed out. But under the head of Evolution two different series of processes are included, the physical and the biological. Changes may be relatively simple dealing with units which may be assumed to be entirely alike. From such conditions arise the so-called exact sciences, those in which mathematics or the logic of quantities can be brought into play, thus extending, not knowledge, for mathematics adds no facts, but our recognition of the full significance of the facts we have. Thus physics, and its great expansion astronomy, deal with motion, the pushing and pulling of objects assumed to be uniform. The science of chemistry deals with internal conditions of objects, again assumed to be alike, except for relations of atoms as affecting one another by unions or repulsions. This too is relatively exact science, because mathematics is one of its instruments of precision.

Set off against Physics and Chemistry we have the science of Life or Biology. It deals with the same chemical elements, subject to the same physical laws, but under a new relation, that of *Organization*. All living be-

ings are *organized*, that is made up of parts having different functions and definite connections one with another. Thus living creatures large or small, simple or complex, differ in certain respects from all inorganic or unorganized masses of matter.

All living beings possess Individuality. That is, no two are alike, though common likenesses among them permit and demand classification. Such resemblances when deepseated have but one known explanation, that is, of origin through common heredity. All organisms possess Irritability. That is, they are affected by external influences. feature ranges from the "touchiness" of onecelled creatures, through perfect intergradations, to reflex action which culminates in Instinct on the one hand and on the other Intellect, the highest manifestation of cooperative cell action. All organisms demand Embolism. They wear out their own substance, replacing it by food. All organisms have the function of Reproduction. They cast off germ-cells which are capable under favorable circumstances of developing into the likeness of parents or ancestors. Finally Organisms are subject to Evolution, from generation to generation, a relation unknown in Physics and Chemistry.

In brief, Organic Evolution is the process whereby those organisms which have run the gauntlet of life leave progeny like themselves, likewise capable of endurance and adaptation. while those weaker or less adaptable tend to fall behind or perish in the race. This process is called Natural Selection, and constitutes, with the innate traits of Heredity and Variation, the controlling factor of Organic Evolution. These however do not constitute the sole factor concerned in life divergence. In the Origin of Species the final division or moulding is due to some form of "biological friction" which, through its many forms of barrier, causes separation and segregation within each group.

With all these matters science and science only is concerned. Science deals with realities: that is with objective facts as impressed on the nervous system of man. Its conclusions are thus to be distinguished from memories (or past realities) from philosophical deductions, superstitions, fancies, delusions, illusions, and from isolated facts not yet set in order. We know no source of objective truth other than the human senses, and no test of truth save through the verification and expansion of the senses through instruments of precision. The scope of

Science includes therefore all objective truth and it questions the validity of all others.

The scope of Religion depends on the definition we give to the term. The word is used in different senses, these bearing a certain relation one to another, but by no means identical in fact or spirit. From the standpoint of scientific analysis religion is the instinct of fear, awe, reverence, worship, faith, duty, response to the lure of happiness, arising from the recognition of the gigantic forces which surround humanity, and of our desire to act in accord with their supposed demands. In a historic sense a religion is definable as the form in which the spirit of reverence has become embodied in human traditions and institutions. It is a system of belief as well as of worship, and as such. creeds, ceremonials, and organization have grown up around it, either as aids, as parasites, or as both. The distinction between the two uses of the word is indicated in the epigram: Religions die, Religion never!

Religions are historic and traditional. The assumed data of one religion are often contradictory to those of another, and as Science moves more rapidly than belief, the assumed "fundamentals" of all of them become more or less at variance with knowledge.

Religion is natural and inherent, as unescapable as the feeling of love to which it is closely akin, the two being subject to like suppressions and like perversions. Both spring "eternal in the human breast." The spirit of religion is quite as likely to be found in dissent from historic religion as in conformity with it. All creeds have, in fact, been written by heretics, that is, by dissenters from the prevailing beliefs of the times.

In a strict or scientific sense Religion is personal or individual. One may join another's communion, enter another's cult, or accept another's creed, but individual religion admits of no compromise. The question of whether a religion is true or not has no meaning. Religion does not rest on statements of fact, either of science or of history. The actual problem is as to whether impulses, emotions, opinions or actions called religious work out for human betterment. "Pure religion and undefiled" is not concerned with theological subtleties. Its test is, *Does it "feed my lambs?"*

In this Introduction I have briefly indicated a layman's point of view of some elements involved in the warfare of religion and science. No such conflict can exist except in the region in which tradition and super-

stition have attempted to forestall knowledge. No problem of fact has been worked out completely. Still less is there any which have been thought out accurately in advance of finding out. For example, churches and schools have for two centuries done homage to the ignorant and arrogant dictum of Archbishop Usher as to the age of the Universe. "Heaven and earth, center and circumference, were created all together in the same instant, with clouds full of water, on October 23, 4004 B.C. at nine o'clock in the morning."

When nonsense like this is assumed to be part of religion, it is not strange that common sense revolts. The real conflict therefore is not with Evolution or with any other technical conclusion of Science, but with the common sense of humanity, which finds no virtue in superstition or in believing or pretending to believe what we know is not true.

The same general views of nature and of man are set forth by Dr. Sunderland from the different point of view of a religious teacher.

Stanford University, June 30, 1925.

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EVOLUTION AND RELIGION

CHAPTER I

THE EVOLUTION OF THE WORLD

As to the manner in which the physical world came into existence, two theories offer themselves for our choice; only two. One is the old theory, to which we have been accustomed all our lives. The other is the new theory, which science teaches. In other words, one is the theory of creation in a limited fixed time, set forth in the book of Genesis. The other is the modern scientific theory of Evolution.

As thoughtful, candid, truth-loving men and women, which of these theories shall we accept? I do not mean, which would we prefer to accept, if both were equally true. But which must we accept, if we are to follow the evidence which offers itself to us?

One of the most interesting revelations of modern scholarship is the fact that nearly all nations and peoples have their cosmogonies, or theories of creation.

As soon as men rise above a very low grade of civilization, they begin inevitably to ask

themselves questions about the origin and meaning of their own existence and that of the world around them. Where did I come from? Where did the world come from? How did things come to be as they are? And as children asking questions about the cause of strange phenomena, and not getting satisfactory answers, are very likely to make up answers of their own, so men in all parts of the world are found to have made up answers to these questions of theirs about the origin of the world and of human life. These answers are their cosmogonies. explains the fact that, somewhere in the more ancient portions of the literature of most peoples that have a literature at all (usually in their sacred books, if they have such books) there are found recorded more or less extensive cosmogonies, or accounts of the creation of the world and of man, according to the theories which they have thought out for themselves on these subjects; and even among peoples who have no literature and no written language, it is common to find legends and tales of the same character. which pass from person to person and are handed down from father to son orally.

Thus it appears that our Bible is not alone in containing a cosmogony.

It will, perhaps, be worth our while, before examining the cosmogony of Genesis, to glance briefly at a few of the creation theories which are, or have been, entertained by non-Christian peoples.

Sir John Lubbock tells us that when a missionary asked the Queen of Singa, in Western Africa, who made the world, she replied without hesitation, "My ancestors." This is one form of the creation theory.

Some rude tribes believe that all things made themselves. This is another form.

The idea that all things originated in some way from water, has been very widely entertained, particularly among primitive peoples. The Chippewa Indians held the conception of the world as originally existing in the form of a vast body of water, out of which the Great Spirit raised the land. The Mingoes and Ottawas represent a rat as bringing a grain of sand from the bottom of the primitive ocean, and out of that sand-grain the dry land grew. Unfortunately, they do not tell us the origin of the rat. In Polynesian mythology the earth and heaven always existed; but the earth was at first covered with water. At length the Supreme Being drew up New Zealand by means of an enchanted fish-hook.

The conception of the world as orginating in an egg is the one which perhaps has been most widely held. This conception, under one form or another, is found in Finland. Polynesia, China, Phœnicia, Egypt, and India. The notion of the Finns was that the yolk of the primal egg became the earth, and the white the all-surrounding ocean. This reminds one of the idea of the Brahmans. found in the Laws of Manu, one of the Sacred Books of India, which opens with a cosmogony, as does our Old Testament. In that cosmogony we are told of the Self-existent Lord, who with a thought created the waters, and deposited in them a seed, which became a golden egg, in which egg he himself was born as Brahma, the progenitor of all the worlds.

The Scandinavian legend of creation gives us first of all a yawning gulf of chaos or nothingness. On the north of it was a region of boundless ice, and on the south another of boundless flame. From the contact of the ice and the fire arose the giant Ymir, from whose body, after he had been slain, were formed the earth and the heavens.

According to the Greek cosmogony, in the beginning was a vast and formless chaos, from which the earth and heaven separated themselves as independent divinities. These married, and from them sprung demigods and men.

The Zend-Avesta, 'he sacred book of the ancient Persians, carries the beginning of creation back to the Eternal Being. The Eternal Being produced two gods; Ormuzd the God of Light, and Ahriman the God of Darkness. The God of Light created the heavens and the earth, in six periods of time, man being made last.

It is not strange that many of these creation theories, coming from so early periods as they do in the history of races, should be crude and even childish. Some of them, however, manifest much reflection and insight. For example, some of the thoughts expressed in the Hindu Vedas regarding God as the Creator and upholder of all things, are very lofty. I will quote a few lines of a hymn from the Rig Veda, which is probably older than any portion of our own Bible, and many centuries older than the book of Genesis. Sings the ancient Hindu poet:

[&]quot;In the beginning there arose the Source of golden light;

He was the only born Lord of all that is: He established the earth and the sky;

"He who through his power is the only King of the breathing and awakening world,

He who governs all, man and beast;

"He whose power these snowy mountains, whose power the sea proclaims, with the distant river; He whose these regions are, as it were, his two arms;

"He through whom the sky is bright and the earth firm,

He through whom the heaven was established, he who measured out the light in the air;

"He who by his might looked even over the waterclouds,

He who is the one God above the gods;

"O Prajapati, no other than thou is Lord over all these created things." 1

Though this Vedic hymn does not lay down any complete order of creation, yet its general conception of creation, and of God as the Creator, is very high, and is worthy, as Max Müller so well urges, to stand beside the highest utterances of the Old Testament on this subject.

What are these creation stories? Are they history? Are they records of real events? Are they not rather legends, myths, dreams, creations of the imaginative faculty of men asking themselves these questions, which all men must ask, of how the world and the

¹ Rig Veda, x. 121 (abridged).

things that it contains came to be. And finally, coming to our own story of the creation, as it appears in the book of Genesis, is it different in kind? Or does it fall into the same class with those which we have found among other peoples? Is there any more reason for believing that the Hebrew cosmogony is actual history than there is for believing that the cosmogonies of Greece and India are history? Does the Genesis story bear any marks of history? Does it stand the tests of modern science? Or does a critical examination show at every point its legendary character? Let us see.

As preliminary to such an examination, let me quote the words of Dean Stanley, spoken in Westminster Abbey, at the funeral of Sir Charles Lyell, the great geologist. Said Stanley:—

"It is well known that when the study of geology first arose it was involved in interminable schemes of reconcilation with the letter of the Scripture. There were and are two modes of reconciliation, which have each totally and deservedly failed. The one attempts to wrest the words of the Bible from their real meaning, and force them to speak the language of science; and the other attempts to falsify science to meet the supposed requirements of the Bible. It is now clear to all students of the Bible that the first and second chapters of Genesis

contain two narratives of the creation, side by side, differing from each other in almost every particular of time, place, and order. It is now known that the vast epochs demanded by scientific observation are incompatible both with the 6,000 years of the Mosaic chronology and the six days of the Mosaic creation."

It should be borne in mind that this is the utterance, not of a radical or an iconoclast, but of one of the most conscientious and deyout of modern Christian scholars. I wish especially to call attention to his statement that there are two narratives, and that they are contradictory—though both involve the theory of special creations, and are equally hostile to the theory of Evolution. Where are these two narratives to be found? The first begins with Genesis 1:1, and ends with Genesis 2:4 (middle of verse): the second begins where the first leaves off, and ends with Genesis 2:25. Let us inquire with some care as to the contents of the first, leaving the other for examination in the following chapter, with which it is more closely related.

The first Genesis story of creation opens with the words: "In the beginning God created the heavens and the earth." As it proceeds it states the time occupied in the creative work to have been six days—each

with its evening and morning; and it informs us what objects were made each day.

On the first day light was created, and divided from the darkness, thus causing day and night. On the second day a firmament. that is, a roof or dome (what we call the sky, believed by the Hebrews to be solid like glass) was made, to separate the waters above it (stored there as reservoirs for rain) from the waters below it. We learn elsewhere that this firmament or crystal dome was believed to have in it windows, which could be opened when it was necessary to pour down rain upon the earth. On the third day, the remainder of the waters (those that were beneath the sky-roof) were collected together to form the seas; and the land which was thus brought to view was made to bring forth grass, herbs, and trees. On the fourth day God created the sun, moon, and stars. On the fifth day he made the fish of the sea and the birds of the air. On the sixth day he caused the earth to bring forth four-footed beasts and creeping things; and finally, he created man in his own image. This completes the six days of the working week which the Creator is represented as observing. On the following day, the Sabbath, he rested.

Such is the first of the Genesis stories of the creation of the world and the things which it contains.

What are we to say concerning this story? First, who wrote it? We do not know. Did not Moses? No biblical scholar of any standing now holds to the Mosaic authorship of Genesis. Could the writer, whoever he was, have been an eye-witness? Certainly not, for most of the events described occurred before the creation of man. The only way the writer could know about the facts was by being told by the Creator himself. Does the writer of Genesis claim that the Creator gave him information? Certainly not.

Do we know when and where this story arose? Approximately, yes. It seems to have arisen not in Palestine, but in Babylonia. The Genesis creation-narratives, as also those of the Fall and the Flood, appear to have been originally Babylonian or Chaldean legends or myths. They seem to have been obtained by the Jews from Babylon, perhaps at the time of their captivity there, about five and a half centuries before Christ, or perhaps much earlier, and to have been revised and changed by them, and finally adopted and given a place in their Book of Genesis, which is not the oldest, but

one of the later books of the Old Testament.

But if we find the Genesis record without

value as history, we also find it containing statements which invalidate it as science.

First of all, its time is too short-almost infinitely so-to be a true account of the creation of the world. To be sure, there is a system of interpretation which claims that the "days" mentioned in Genesis mean, not days, but indefinite periods which may be prolonged to enormous lengths. But there is nothing in the record which warrants any such interpretation. The narrative is plain. simple, straightforward. The days are spoken of as real days, each having its evening and its morning. Everything shows that the writer meant exactly what he said, namely, literal "days." Any system of interpretation which makes him mean anything else is one which turns the whole Bible into a book of riddles.

An equal difficulty is the lateness of the creation, or its nearness to our own time. If we turn to our Bibles, in the common version, we find printed in the margin opposite the creation story, the date, 4004 B.C. By any fair interpretation of the Old Testament records, it is impossible to carry back the date of the creation as given in Genesis much be-

yond that time. According to this reckoning the earth is a little less than six thousand years old. The sun and stars are of the same age. But science teaches us that to find the beginning of the earth we must go back not six thousand, but millions probably hundreds of millions of years; and the earth is young compared with the sun and stars. Huxley reckons that the production of the carboniferous or coal formation required six million years. It is estimated that the production of the cretaceous, or chalk, occupied a period as long. But the deposit of these two formations were but brief steps in the geologic history of the globe. Sir Archibald Geikie claims one hundred million years as the minimum time during which there has been life on the earth. This agrees with the estimate of Sir William Thompson (Lord Kelvin). Sir Charles Lyell thinks two hundred and forty million years are necessary for the deposit of all the stratified rocks. Helmholtz calculates that the solar system has been in existence five hundred million Thus we see that science and the vears. Genesis record lack much of agreeing as to the date of the creation both of the earth and of the heavenly bodies.

But these are not all of our scientific diffi-

culties. We find in the Genesis account light created before the sun; as if there could be light without the source of light. Day and night are divided from each other before there is any sun; as if that were possible. The sky is represented (according to the belief of the ancient time) as a solid firmament or dome, separating the waters above it from the waters below. Every child today knows how mistaken is this conception. Plants are represented as created before the sun; as if vegetation or any form of life could exist a moment without the sun's light and heat. The sun is said to have been created later than the earth; when science teaches us that the sun came into being long before the earth, and that the earth is its babe. The stars, too, are represented by the Genesis writer as made after the earth; when we know that the earth is a creature of yesterday compared with most of the stars many of the stars, indeed, being vastly older than the sun itself. Plants are represented as created long before animals—one on the third day and the other not until the fifth. Here again science says, No, the evidence is very strong that plants and animals came into existence practically together.

Thus it appears that the Genesis story

breaks down at every point when we attempt to regard it as either history or science, that is to say, as a record of actual facts.

What, then, is it? The only answer possible to be given in the light of modern knowledge is the one suggested by the similar creation stories found among many peoples, a few of which have already been noted. It is legend, it is myth—as clearly so as are the cosmogonies of Greece and India. It is an attempt made in an early age by some gifted mind, or rather by many minds, to answer out of their own thoughts the question which man has been forever asking. How did things come to be? This is the position now taken by nearly all the leading biblical scholars of the world. This is the position taken by practically all scientists. Regarded as a work of the devout imagination the Genesis narrative is interesting and valuable. It has been well called "A Poem of Creation." As such it is striking, impressive, in parts sublime. But as something to be regarded as facts, it no more stands the critical tests of our time than would Milton's "Paradise Lost," if that great work of the creative imagination were set up as history or science. It is not the story of how God did create the earth and the heavens. It is a

picture of how some gifted soul or souls of the ancient world *dreamed* that the creative process went on.

So much, then, for the theory, which has so long been almost universally accepted in the Christian World, that the world was created in a limited and fixed time, as set forth in the first chapter of Genesis.

There is one other theory, only one, that claims our attention. It is the modern scientific theory of Evolution. Let us now turn to that to see what are the evidences of its truth.

Of course, in the limited space of a single chapter, I cannot undertake to detail all or a tithe of the evidence which believers in Evolution claim for the doctrine. Nor is this necessary. All I can do—and it is enough—will be to indicate something of the *character* of the proofs relied on, in order to show how direct and constant is their appeal to fact, and therefore how unequivocal and inescapable are the conclusions to which they lead.

Let me begin with suns and planets. Why is it believed that the origin of these is by evolution? Because we have only to look into the heavens above us to see the evolutionary process going on. The astronomer by means of his telescope and his trained powers

of observation is able to discover world-making in every stage of progress.

Here is a nebula—a vast fiery cloud. What is that? Clearly it is world-stuff, or material out of which worlds are made. Here is another nebula. Condensation has begun at one or more points, and perhaps evidence of a whirling motion is apparent. What does that mean? It means that world-evolution is in process. Here is a nebula that has condensed into a great central sun, and from it a ring has separated. What is that ring? It is the first step toward a planet. Thus it is that the telescope, if not the naked eye, reveals to us sun-making and planet-making in all stages. Could proof be stronger that Evolution is the law of the heavens above our heads? And if other worlds are formed by the process of Evolution, is not the presumption strong that ours was formed in the same way?

yes. Y'il were were me and The pour nobula.

Turn now from the heavens to the earth—from astronomy to geology. Here again the evolutionist appeals not to hearsay, or dream, or guess, but to observed and verified fact.

How did the solid crust of the earth come to be? He examines the crust to see if there be not written upon it a record. A wonderful record he finds—a record inscribed by

nature herself, by the hand of her elements and forces—fire and water and wind and ice. And so he sets himself to reading the record. He studies volcanoes, and the effect of heat on rocks. He studies stratification, as it is going on to-day, and as it reveals its laws to him in a thousand ways. He studies the rise and subsidence of lands, and the consequent changing of sea lines, as these phenomena are seen now and are traceable in past ages. studies the laws of erosion, by which mountains are cut down and carried into the sea. and vast river beds are scooped out. He studies the action of wind and rain and frost and heat in disintegrating rocks and changing them into soil. He studies the laws of glaciers, and observes how they plane down hills and fill up valleys, and carry their enormous loads of rock and earth half across continents.

He knows that the laws and forces whose effects he is studying are constant, and therefore that he holds in his hand the key to the past history of the surface of the planet, and how it has come to be what he sees it now. Change has been ever going on. It has left its record everywhere upon the rocks; and what is that record? It is Evolution.

It took a very long time to fit the earth for

life, even life of the lowest kinds. But the preparation was made, and life came.

As to how life originated, evolutionists freely confess that they are in ignorance. The tendency is to believe that the evolutionary process has suffered no break, and therefore that life was developed somehow from the not-living. But this belief is based rather upon faith in the uniformity of nature's methods than upon any direct proof. If life did come by an evolutionary process from the not-living, it was at a time and under circumstances such as we know nothing of and possibly can know nothing of, and such as probably can never be repeated in the history of the planet.

Even if we grant that life at its beginning was a special creation, everything indicates that that beginning was so very low down and so simple as to form only the merest starting-point for a life-history of the globe. From that simple beginning (in an organic substance probably differing only in the slightest possible degree from the inorganic) it has developed on and up, from the lower to the higher, from the simpler to the more complex, dividing early into two great main streams, vegetable and animal life, then dividing and sub-dividing again and again,

and ever multiplying and unfolding, until at last we have the earth covered with all the rich and varied and manifold forms of life which appear on its surface and in its waters to-day. How do we know that all this wonderful evolution of life has gone on? We know it by reading the story in nature's stone book, where it is all written down in characters that cannot possibly be misunderstood.

Strong arguments in support of the evolution theory may be deduced from embryology, morphology, and the geographical distribution of organisms. But these I must pass over. Enough, however, has been said to show the general nature of the evidence on which the theory rests. Its appeal is everywhere not to credulity but to knowledge, not to guesses but to the most carefully verified facts.

The theory may be said to have received universal acceptance among scientists. Says Professor Edwin G. Conklin:

"The whole scientific world long since was convinced of the truth of Evolution, and every year which has passed since the publication of "The Origin of Species, in 1859, has added to the mountain of evidence which has been piled up in its favor. . . There is probably not a single biological investigator in the

world to-day who is not convinced of the truth of Evolution."1

It is easy to see that for the men who are best qualified to judge of a scientific doctrine to have given in their adhesion to Evolution with such unanimity, is significant in the highest degree. When the new doctrine first came on the scene it was virtually without a friend. The leaders of scientific opinion to whom it made its appeal had all been trained in other schools of thought, and came to the investigation of the claims of Evolution with their prepossessions against it. They had believed and taught, and not a few of them written books, in support of a different theory, which must be relinquished if the claims of Darwin were true. Under such circumstances it was in the nature of things that only proofs which were seen to be of the weightiest character could convert them to the new doctrine. Yet with very few exceptions they were coverted; and as we have seen, there is not a scientist of any note living today who does not accept the evolution theory in some form.

We have now before us, in brief, the two theories of the origin of the world, which present themselves to modern men asking

¹Evolution and the Bible (1922), p. 6.

for acceptance. Is there any question which one we must receive, if we are truth-loving, and care at all to have our beliefs based on realities?

And now we come to the important question of the relative religious influence and value of the two theories.

I know the fact that one is ancient and venerable, while the other is new, and especially the fact that one is contained in the Bible, while the other is not, may seem to give the greater religious claim to the theory of creation found in Genesis.

And yet is the claim necessarily valid? Has God no truth besides that which the Bible contains? Rather, if we are not atheists, must we not say that all truth is of God, whether found on parchment or on stone; whether inscribed by pen held by human hand, or by wind and rain and ice and fire on mountain sides; whether written two thousand years ago in Palestine, or to-day on the face of the starry sky above our heads, or of the earth beneath our feet?

Men who have never learned to see God, anywhere except in the past, are always afraid of any new truth that bears upon religion. But how faithless and God-dishonoring is such a fear! Is God a God of the

past only? Are his revelations ended? Is there to be progress in everything else connected with man's life except that which is highest of all, the moral and spiritual? Without the opening of eyes to new truth in religion, where would have been the Protestant Reformation? Where would have been Christianity itself? Where would have been any of the great forward movements which have quickened and enlarged the world's religious thought and life?

The foundations of religion are not in a book. They are rather in the soul of man. And if they are in the soul of man, the acceptance of the belief that God's creation is perennial, continuous, eternal, cannot disturb them, or do anything except deepen and strengthen them.

It is asserted by some that Evolution is atheistic; that it puts God out of the universe, and leaves us only law instead. True, there are possible forms of the evolution theory which are atheistic, which push God one side, and give us only law. But there are other forms of it which are profoundly theistic—which fill the universe full of God, as no other theory known to man does, certainly far more than the Genesis theory itself does. That makes him a creator from

without. This makes him a creator within—his creative power operates in all things from atom to sun. That makes him a creator of the world, once; then he withdraws, and so far as creative function is concerned, is forever thereafter an absentee God. This makes him a creative intelligence and power that never sleeps and never withdraws from any atom of his universe.

"The world is the ring of his spells,
The play of his miracles.
Ever fresh the broad creation,
A divine improvisation,
From the heart of God proceeds,
A single will, a million deeds.

"He is the axis of each star,
He is the sparkle of each spar,
He is the heart of every creature,
He is the meaning of each feature;
And his mind is in the sky
Than all it holds more deep, more high."

Thus it is that the doctrine of Evolution ought to fill, and rightly understood does fill, all the universe with God, as the meaning, and the ever-living, never-sleeping creative power of it all.

As to the fear that Evolution will dethrone God because it enthrones *law*—what is *law*?

What can it be but the sign and manifestation of One without whom law could not exist? Is law a Power? Rather is it the path along which a power—the Eternal Power—marches to the attainment of its great ends. "God is law, say the wise, O soul, and let us rejoice; For if he thunder by law, the thunder is yet His voice."

Men who cling to the old and are afraid of the new talk eloquently about the Genesis story of the creation of the world being a "revelation" of God. And because it is a revelation we are told it must be true. how is it a revelation? The claim is quite incorrect. In truth, it is in Evolution that we have a revelation of God; in all previous theories of creation we have had only assertions of God. What does the Genesis story do? It asserts: it asserts that God at a certain time did so and so. It shows us nothing. It uncovers nothing. It reveals nothing. (To reveal is to show or to uncover.) What does Evolution do? It uncovers facts of nature. It shows us God actually doing. exhibits the divine creative work going on before our eyes, in the past and in the present. Thus God is not simply asserted as a creator, but he is revealed as a creator. Which, then, brings God nearer to us and

makes him more real and certain, the old or the new?

Tell me the story of Michael Angelo and his great art creations, and you do much. But take me into Michael Angelo's studio, and let me see the great master's tools, his plans, his unfinished sketches, his work actually going forward, and you do vastly more. Is it not clear how this applies to the two creation theories? The old creation theory talks to me about the supreme World-Artist —tells me a story as to what he did once on a time in a far distant past. The new thought of creation by Evolution takes me by the hand and leads me into the great Artist's world-studio, universe-studio, amidst his tools of nature-forces and laws, his designs of plants and animals and worlds, his work done and being done, of life-building and universe-building and man-building, and thus reveals him, and brings him nearer to me, and lets me see him, feel him, touch him, know him, as the other never did and never can.

Men talk about the doctrine of Evolution being irreligious. What a strange use of words. Is it irreligious to enlarge the sphere of God's power and work from a narrow and circumscribed earth to a boundless universe? Is it irreligious to extend the time of his creative activity from six days to ages without beginning and without end? Is it irreligious to transform our thought of a creator from that of a powerful mechanic, or potter, operating in one limited place, to that of a Divine Spirit quickening and giving life to his children and his worlds everywhere?

No, it will be seen some day that the thought of Evolution, fully comprehended in its meanings and its bearings, is a mighty enlarger and exalter of religion, a mighty dignifier and ennobler of man, a mighty revealer and glorifier of God.

When will men learn that God is the God of the living, not of the dead? When will they learn that the eternal ages are in his hand? When will they discover that the mighty laws and forces by which the world moves on to its great destiny, are his? When will they be wise enough to cease fighting or fearing the great new revelations of his truth in nature and in man, by which he is rolling the world on into the light?

CHAPTER II

THE EVOLUTION OF MAN

In the preceding chapter we found two theories of the origin of the world offering themselves for our choice—only two; namely, the theory of creation by sudden fiat, found in the book of Genesis, and the modern scientific theory of Evolution. As soon as we pass to the subject of the origin of man, we find the same two theories presenting themselves for our choice again. Was man created at a given fixed time, from the dust of the ground, as the Genesis story represents? Or did he, as well as the world in which he lives, come into being by an evolutionary process?

Let us first examine the Genesis story, and see what claim that offers for our credence.

As I have already pointed out, the book of Genesis gives two different and conflicting accounts of man's creation. According to the first account, all other things are made before man; man is made last. According to the second account, as given in our common English version, the order of creation is as

follows: first, the earth and heavens; second, plants and herbs (made, but not planted in the ground); third, man; fourth, a garden (from the soil of which trees are made to grow); fifth, all beasts and birds; sixth, woman. According to the first account, man and woman are created at the same time, and presumably out of the same material. According to the second account, they are created at different times, and out of very different material. In other words, man is created early, out of the dust of the ground, after which he is left a long time alone, his only companions being the beasts of the field. Then the Lord causes a deep sleep to fall upon him and while he sleeps, his side is opened, a rib is taken out, and from this is made a woman, to be a helpmeet for him.

Then follows the story of the Paradise Garden, with its tree of forbidden fruit, of which Adam and Eve, tempted by a talking serpent, eat, and as a consequence are driven out. For their disobedience the sentence is pronounced upon the serpent that henceforth it shall go on its belly (as if it had walked upright before), and it shall eat dirt; upon the woman the sentence is pronounced that she shall bear children in labor and sorrow, and shall be in subjection to her husband; the

man is sentenced to labor for his bread, and the earth is cursed for his sake and made to bring forth thorns and briars from this time on; and death, which we are given to understand was not in the world before, and would not otherwise have entered, is now made the doom of the human family. Then Adam and Eve are driven from Paradise, to become the parents of a fallen, sinning, suffering, lost race. Thus the plan of the Creator for a good world, filled with virtue and happiness, is broken down and destroyed at its very inception.

What shall we say of this story?

If we found that the Genesis narrative of the creation of the world must be set down as legend or myth or poetry, even more does it seem that this of the creation of man must be set down as the same. Why? Because all its marks appear to be marks of the legendary, not of the historic; of the imaginary, not of the real.

In the real world serpents do not talk. They have never walked upright, but have always crawled on the ground as they do now. Serpents do not live on dirt as food, and never have. The world brought forth thorns and briars long, long before man arrived upon the scene. Death did not begin

with Adam. It has been in the world untold ages—indeed ever since life appeared upon the planet. Death was a necessity if man or any animal was to have an organized physical body. To sing, as Milton does, of

"the fruit

Of that forbidden tree whose mortal taste Brought death into our world and all our woe," may be admissible for a poet, but it has no relation to fact. It is a mistake to think of labor as a curse. Excessive labor is a curse as excessive anything else is; but labor in itself is a great blessing. As to the subjection of woman to man, it has to be confessed that there has been a great deal too much of such slavery in all ages of the world: but it is not a necessary condition of things, and certainly it is not one which we have a right to charge upon God as his decree. That woman was created out of a rib of man, there is no reason whatever to believe. Every scientist will deny the possibility of such a thing. However man was created, woman was certainly created in the same way. Nothing could be more unhistoric and unscientific in its very nature than the whole Genesis story of the creation of man and woman, and of the events connected with it. Everywhere in the story there are clear marks of legend, of myth, of the imagination; nowhere do we find marks of historic fact.

One of the greatest difficulties connected with the Genesis story of the creation of man is found in the matter of time. It has already been shown that the age of the world must be accepted, not as the six thousand years which the Bible record allows, but as millions, perhaps hundreds of millions, of years. The time during which man has been in existence is of course short compared with the whole period since the creation of the earth, and yet it is vastly longer than the biblical record contemplates.

Assyriologists have been for some time in possession of definite records showing that a powerful kingdom, under the rule of Sargon I and his son Naram-Sin, existed in the Valley of the Euphrates, and extended as far as the Mediterranean Sea on the west, at as early a date as 3750 or 3800 years before Christ. This is many centuries before Noah's flood, and within two centuries of the creation of the world and of the first man, if we are to take the common Bible chronology. Professor McCurdy, in his scholarly and candid work, "History, Prophecy, and the Monuments," places the date of the founding of the cities of Erech and Ur, in Babylonia, at

5000 years B. C., and the date of the first agricultural settlements in the lower Euphrates valley at 7000 B. C. Professor Hilprecht, of the University of Pennsylvania, who has been connected with some of the most fruitful excavations, at Nippon and elsewhere, that have been made in recent years, has found writings on clay tablets which he claims cannot be of a date later than 6000 B. C., and he is of the opinion that the development of such a system of writing as was used could not have taken place in less than three thousand years. This would carry us back to 9000 B. C., or a time five thousand years earlier than the date of the creation printed in the margin of our Bibles.

Turning from the valley of the Euphrates to the valley of the Nile, what do we find? The earliest reliable Egyptian history may be said to begin with Menes, the first king who united the different provinces of Egypt into an empire. What is the date of Menes? Broeck says 5702 B.C.; Unger 5613, Mariette, 5004; Brugsch, 4455. The weight of authority fixes it at 5000 B.C. or earlier. But that was not the beginning of human life in Egypt. At that time there was an advanced civilization. In various parts of Egypt pottery and flint implements have been

discovered, coming from peoples inhabiting the Nile valley long before the civilized Egyptians had an existence. Professor Flinders Petrie (and there is no higher authority) says that these discoveries take us back at least nine thousand years, and perhaps very much farther. Maspero, in his great work, "The Dawn of Civilization: Egypt and Chaldea," says that civilization in the Nile valley is at least fifteen thousand years old; and he believes the culture of Babylonia to have been earlier still.

The time required for the development of the languages of the world also takes us back very far. Professor McCurdy says it is impossible to believe that the Arabic language, the oldest of the Semitic tongues, had its origin less than fifteen thousand years ago. But probably Semitic in all its forms is comparatively recent. There is reason to believe that man existed vast periods of time before any of the languages now known had their birth.

It is not, however, until we go to geology that we get the earliest traces of man. These traces are in the form of teeth, skulls, or other human bones, and especially of implements of various kinds, crudely shaped out of flint or other hard stone. Such traces have been discovered in England, in nearly all parts of western, central, and southern Europe, in northern Africa, in western and southern Asia, and in various places in America, from the Atlantic to the Pacific. And in many places they are found in such circumstances that by means of deposits formed above them, or alteration of sea or land levels, or other geological changes that have taken place since they were buried, it is possible to ascertain with considerable certainty their age. They go back far into the glacial epoch, if not to preglacial times. The northwest of Europe seems to have been peopled with these early men for thousands of years. At that time the climate was subtropical. Such flora as we now see in Italy and northern Africa extended nearly up to the arctic circle, and the elephant, the hyena, and the leopard lived in Britain, which was at that time joined to the mainland of Europe. Then came great glaciers which pushed their ice-mantles down far into Germany Europe, and to Philadelphia in America. At the close of this period (or these periods) of cold and ice, the earliest men, sometimes known as Drift-men, had disappeared, and another race known as the Cave-men had taken their place. How far back does this

carry the earliest traces we have of man? Very conservative estimates say from fifty thousand to one hundred thousand years. Quatrefages says one hundred thousand years. Professor F. W. Putnam thinks the evidence clear that early man in North America was contemporary with the mammoth. Dr. Draper says it is difficult to assign to the beginning of the glacial epoch a later date than a quarter of a million years ago. Mr. Croll, from his astronomical calculations. puts it at two hundred and forty thousand years ago. Mr. John Fiske, after making a careful and extended examination of the evidence bearing on the subject, agrees with Mr. Croll. The dates assigned to the Cro-Magnon Man, the Neanderthal Man and the Ape-Man of Java are respectively 25,000 years, 25,000 to 40,000 years, and 500,000 vears.

Another thing about primitive man is as important as his early origin. It is his condition. What do we find the first human being to be? Is he a perfect man, living in a Paradise? And are we to regard all his subsequent condition on the earth as fallen and degenerate, compared with his first state?

On the contrary, we find the earliest man

to be very low down in every way, lacking even the rudiments of civilization, without house, or arts, or clothing, or fire—in mode of life or power over nature hardly above the beasts, and with a skull nearer to that of the anthropoid apes than to the skull of the civilized man of to-day. The change that has taken place in his condition since the faraway time when we first get trace of him has been one, not of degeneration, but of marvelous progress.

So, then, our inquiries as to how long man has been in existence, and what was his condition when we first discover him, bring us two results: first, they show us, beyond all possibility of question, that the Genesis stories of his creation and fall are legendary and not historic; and second, they prepare the way for the evolutionist's theory of man's origin, and go far toward compelling us to accept that theory. If Evolution is true, where ought we to find our first traces of man? Far back in the past, somewhere near where we do find them. If Evolution is true, what ought man's condition to be when we first discover him? Just what we do find it —a condition only a little above that of some other forms of animal life.

Now to these facts, add the facts, still more

significant, brought to light by the comparative anatomist, showing the close connection of man's body structurally with the animals below him. Says Professor Le Conte:

"It is impossible to exaggerate the closeness between man's body and the animal kingdom from a structural point of view. . . . Man's body is identified with the body of all animals in its functions; with all vertebrates, especially mammals, in its structure. Bone for bone, muscle for muscle, ganglion for ganglion, almost nerve-fibre for nerve-fibre, his body corresponds with that of the higher animals. Whether he was derived from such animals or not, certain it is that his structure, even in the minutest details, is precisely such as it would be if he were thus derived by successive slight modifications."

"All the back-boned mammals are constructed on one general pattern; man, monkey, deer, horse, whale, are all outgrowths of one idea—two pairs of limbs joined to a skelton that has within it a battery of nerves, and at one end of the column a collocation of nerves in a bony case, serving as a seat of sensation and dominant perception. Man simply has a larger brain, and his forelimbs free, while he rises to walk on two feet."

Note, with the rest, the remarkable fact that the embryo of the human infant in its development actually passes through stages of close similarity to every successive form

¹ Evolution and its Relation to Religious Thought, p. 287.

² E. P. Powell, Heredity from God, p. 151.

of animal life—beginning with the lowest and simplest, and advancing up through resemblance to those of fish, reptiles, birds, lower mammals, last of all apes, then the true human. What a suggestion have we here that man's life-path on the earth has been a development up through all the lower forms; and that this embryo development in every individual human being is nature's way of remembering the long path the race has travelled to reach its present place at the top of the ladder of the world's physical life!

It is very suggestive, too, that "the human being who degenerates moves directly back towards the ape in form. The idiot has a retreating forehead, prominent teeth, claw-like hands, and sometimes even a hairy body. His language is an ape-like chatter, and his anger a scream, almost exactly that of a monkey in the forest.

"The case is not different with wild races. Their foreheads are retreating; their bodies covered with hair; their language simian; their eyebrows flexible, and eyes restless; abdomen protruding, and arms longer in proportion than any civilized races."

Thus the lower down we go, and the farther back, the nearer we find man approximating the forms of animal life below him.

Now put all these lines of evidence together (and there are many more that I cannot even touch), and it is very plain why scientists have come to hold with almost absolute unanimity that physical man, at least, is the result of an evolutionary process from lower forms of animal existence.

Nor is the evolution believed to be confined to the physical. It seems to extend to the psychical also.

There is hardly a mental faculty in man that is not found, at least in germ, in the lower animals. Stories of the intelligence of animals might easily be told by the hour. Horses have been trained to perform remarkable feats, involving counting, and much else. that is, to distinguish printed words from per accept other, bringing a card continuous from per accept continuous from per accep word "water" when he wanted to drink, one containing the word "meat" when he wanted food, and so on.

It seems plain that animals may be taught right and wrong. A dog will often show by his actions as plainly as words could speak it, that he is conscious that he has done some wrong thing, and is ashamed of it.

Fidelity is often manifested by animals in a very high degree. A family went away

from home leaving their dog shut up in the cellar, to remain there during their absence. They carried to him before their departure a piece of meat for his food during the time. On returning, in ten days or so, they found the dog dead, starved to death, and the meat by his side untouched. He had been accustomed to watching meat, and other things, and evidently had understood that this meat was given him to watch. So he died rather than disobey or be unfaithful to his trust.

The affection of animals is often very deep and strong. Any one who has seen Landseer's touching and powerful picture, "The Old Shepherd's Chief Mourner," will never doubt this. In the city of Edinburgh, Scotland, they show travellers a monument which the people there erected some years ago to a dog. The dog's master had died. The dog followed the lifeless form to the grave and would not go away. No inducement could draw him from the sacred spot where his master lay. By and by a butcher in the neighborhood took pity on him and fed him. At last the dog so far yielded as to go once a day at a certain hour to the shop of the friendly butcher, to get his allowance: but no sooner was he through eating then he would return again to his charge. And he passed the rest of his life—some years—guarding the grave of the one he loved. So touched were the people of the neighborhood by such affection that when the dog died they joined, rich and poor together, in building him a monument.

These illustrations show how closely connected we are with the forms of life below us, both on the physical, and on the psychical sides. Psychical evolution is much more mysterious and difficult to explain than evolution of the body, but everything indicates that evolution is the law, not of one half, but of the whole of man's nature.

I do not wish to be misunderstood by this to contend that there is little difference between man and the lower animals, or no difference except in degree. Evolution as expounded by its greatest masters does not teach this. It teaches that there are deep and radical differences. Let us note what some of them are.

First, there are differences in bodily structure, which are of immense significance. Man stands upright, as no brute does. Thus he is by nature a forward looker and an upward looker. This has vast consequences. Yet this upright position has been attained by an evolutionary process. He has a true hand

—something which no animal below him possesses. The hand is the most wonderful of mechanical instruments, and itself goes far toward giving man dominance over all other creatures. Yet his hand is simply the highest and most perfect form of that development which has given the fish its fins and the quadruped its forepaws. Man has a brain which by its capacity and quality crowns him king of the world. Yet everything shows that his brain has developed and enlarged and grown complex and superior to all other brains by degrees and through long use.

Some have held that the radical difference between man and the lower animals is found in language. And it must be confessed that the difference here is very great. No animal below man has developed a real language.

But we must go to mind before we find the deepest distinction of all. It is man's mind that makes him king and lord over all other created beings on earth.

And yet even this does not make the distinction quite clear. We must ask where in mind does the essential difference lie, since certain mental qualities, and even germs of qualities which we may call moral, we have already discovered in brute animals.

Nearly all the most competent investiga-

tors agree in drawing the line of distinction between the human mind and the brute mind at self-consciousness. The lower animals are conscious; but we have every reason to believe they are not self-conscious. They have not become self-centred personalities. This is attained only with self-consciousness. In the lower animal, there is what we may call the anima, or animal soul. But it is incomplete, imperfect, unstable. In man it rises to completeness, stability, self-centredness, full individuality, personality. Self-consciouness seems to be the simplest and clearest sign of personality. Its appearance among psychic phenomena marks spirit birth. We may imagine men to have emerged ever so gradually from animals; but in this process of gradual development the moment he becomes conscious of self, that moment the real man is born. The moment he becomes, not simply conscious, but conscious that he is conscious; the moment he not simply knows, but knows that he knows; that is to say, the moment he turns his thoughts inward in attention and wonder upon himself, and on the mystery of his existence as separate from nature, that moment marks the birth of humanity out of animality. All else characteristic of man follows as a necessary consequence. He is now a person, a self-acting ego. He has now free-will, and real moral responsibility. Out of these grow the recognition of relations to other moral beings and to God, and therefore ethics and religion. Out of these grows, also, the capacity for indefinite voluntary progress. This also means full spirit life, and therefore, as I believe, immortality.¹

In the early years of Evolution there used to be much talk among its opponents about the degradation it puts upon man. But how degradation? Are the most developed and the most intelligent of the animals lower down than the dust of the ground, out of which the Genesis story represents Adam as created? If we had always been taught that God created man by development from the highest animals, that would certainly have seemed to us a far nobler and less objectionable origin than creation out of dirt. Surely, if Evolution is true, God has brought us into being by the most exalted of all possible paths. He has kindled our lives from a torch that has been lighted at a well-nigh infinite cost—lighted by all the life that has been lived on the globe in all the ages past. We are the consummation and crown of the

¹ See Le Conte, p. 302 et seq.

life-history of the planet. What conceivable origin could be more exalted or honorable than this?

I have sometimes dreamed the wild dream of being an eagle, and living an eagle's life, up amidst the storms, the clouds, the mountain peaks, the lightnings. And again I have dreamed of being a deer roaming free in the woods: a skylark singing in the clouds; a fish in the sea; a lion in the desert; a wild horse on the plains; a polar bear on his lonely ice fields; a chamois amid the Alps; a humming-bird or a butterfly among the flowers-and living the different and wonderful lives of all these. If Evolution is true, these dreams come nearer than I may suppose to realization. In me something of the lives and natures of all these, and of all forms of existence below me, actually survives and lives.

Edwin Markham, in his poem "The Making of Abraham Lincoln," gives striking expression to the thought of the vital affinity between nature and man. He sees all the lower forces of nature gathered up as it were into the great President, the great man of the people, to make him what he was:

"The color of the ground was in him, the red earth; The tang and color of the primal thingsThe rectitude and patience of the rocks;
The gladness of the wind that shakes the corn;
The courage of the bird that dares the sea;
The justice of the rain that loves all leaves;
The pity of the snow that hides all scars;
The loving kindness of the way-side well;
The tolerance and equity of light
That gives as freely to the shrinking weed
As to the great oak flaring to the wind—
To the grave's low hill as to the Matterhorn
That shoulders out the sky."

We little realize the rich heritage that comes to us all from the past. We sometimes sing the hymn, "Heir of all the ages, I." All the æons of time have been at work shaping and fashioning the globe, its mountains, its valleys, its continents, its seas, its skies, its seasons, its climates, to make it a fit home for man. All the life-forces of the globe have been busy preparing a life for man. Man gathers all the kingdoms of the world up into himself. Well may he sing with Boyesen:

"I am the child of earth and air and sea!

My lullaby by hoarse silurian storms

Was chanted: and through endless changing forms

Of plant and bird and heast uncessingly

Of plant, and bird, and beast, unceasingly The toiling ages wrought to fashion me.

Lo, these large ancestors have left a breath Of their strong souls in mine, defying death, And change. I grow and blossom as the tree, And ever feel the deep-delving earthly roots
Binding me daily to the common clay;
But with its airy impulse upward shoots
My life into the realm of light and day.
And thou, O sea, stern mother of my soul,
Thy tempests sing in me, thy billows roll.
Within the rose a pulse that answered mine
(Though hushed and silently its life-tide ran)
I oft have felt; but when with joy divine
I hear the song thrush warbling in my brain,
I glory in this vast creation's chain."

So inconceivably splendid a heritage, prepared by the marvellous and unsleeping evolution of the past, do we all find awaiting us, when we arrive on the earthly scene.

Man degraded by evolution? No poet's fancy ever dreamed such exaltation for man as science in our day, in the light of Evolution, is declaring to be verified fact. Well may Emerson exclaim: "O rich and various Man! thou palace of sight and sound, carrying in thy senses the morning and the night and the unfathomable galaxy; in thy brain the geometry of the City of God; in thy heart, the bower of love and the realm of right and wrong! An individual man is a fruit which it cost all the foregoing ages to form and ripen. A cultivated man, wise to know and bold to perform, is the end to which Nature works, and the education of the will is the

flowering and result of all geology and astronomy."

The doubter says, "Yes, all this sounds very well; but in fact it is hollow and empty, because there is no God in it." No God in it? What is Evolution? Perhaps no better or more widely accepted definition has been given than this: "Evolution is continuous. progressive change according to definite laws and by means of resident forces." But what are laws, if they are not the methods of operation of God, the Infinite Wisdom and Power? And what are resident forces, but God the Infinite and Eternal Energy at the heart of all things? To talk of Evolution without God is like talking of wind without air, waves without a sea, light without the sun or the ether, effect without cause. * truth is, no other conception that ever entered into the mind of man is so full of God as Evolution. You cannot find a pin-point of all the eternity-long and universe-wide evolutionary process where God is not. Not until you can expel law from Evolution, and resident forces from Evolution, can you expel God from Evolution.

Too much emphasis cannot be placed upon the fact that the creation of man is not yet completed. As Tennyson sings: "Where is one that, born of woman, altogether can escape

From the lower world within him, moods of tiger or of ape?

Man as yet is being made, and, ere the crowning Age of ages,

Shall not won after won pass, and touch him into shape?

All about him shadow still; but, while the races flower and fade.

Prophet eyes may catch a glory slowly gaining on the shade,

Till the peoples all are one, all their voices blend in choric

Hallelujah to the Maker, 'It is finished! Man is made!'"

I have already pointed out that worlds are in process of creation in the heavens above us, and that on the earth also the creative process is still going forward on a vast scale. So man is not yet fully man. He is only in the process of being created. Even his body has not reached anything like that perfection of health and strength, and that degree of longevity, which it ought to reach, and will reach sometime, when he learns to obey the holy laws of life and health which wrap him about.

But still further below the possibilities of

his nature does he fall in things intellectual and especially moral. Here what poor, poor fragments of men the best of us are! Our faculties are only half formed. Our characters are scarcely more than the embryo of what they ought to be. In so many respects we are only babes where we ought to be men! We look upon the savage with pity, and exclaim, "How far the development process must go on before he can reach full civilization or full manhood!" But how far are most of us from full civilization, judged by any worthy standards! And how very far from manhood at its best, even such manhood as has been exemplified in many actual lives! Our true work in the world is that of cooperating with one another, and all good men. and all regenerating forces around us, and with God, to carry on and ever on the work of spiritual creation, in ourselves, in society, and in the world. It is the work of struggling upward by every means in our power, and helping others to do the same, from the brute beast, which is our starting-point, toward the angel, the free, pure, strong son of God, which is our goal.

Evolution opens up a wholly new outlook for mankind. It antagonizes the old theology at almost every point; but most does it antagonize it in connection with the doctrine of the fall of the race in Adam. That dark, horrible nightmare of the Christian world it sweeps utterly away, replacing it with a faith as full of light and hope as it is possible for man to conceive.

If man came into the world by an evolutionary process from lower forms of life, and as long ago as science indicates, then there was no such Adam as the Genesis legend portrays, and consequently no serpent and no fall. What have we instead? Evolution gives us a world unfallen. It gives us a race which has been rising, with standstills and even set-backs here and there, yet on the whole rising, from the beginning until now, and which is rising still. It places Eden not in the past, but in the future-before man as an ideal and a goal, to beckon him on to forever better things. Instead of a plan of God for the world which broke down in the first act, and required to be mended as best it might be, by a scheme for saving a remnant of the race from the world-wreck, Evolution gives us a divine plan which has never been thwarted and never can be, but which is marching on through the ages with ever enlarging results of good to all mankind.

"The rise, not the fall, of the race is the wholesome belief of to-day.

Onward and upward, from darkness to light, from the slime of the past,

From the animal heritage slowly yet surely emerging at last,

From the cave, from the chase, into fostering home, from war into peace,

From tribes into nations, where law and religion and knowledge increase,

Where in commerce, in culture of fields and of flocks, in art and in song,

In faith and in fellowship blended, in justice and hatred of wrong,

All agencies, human, divine, with gathering wisdom unite

To lift the dim ages beyond their past into glory and light,

Till the nations are born in the power of a heavenly birth,

And the kingdom of God descends and embraces the ends of the earth."

Such is the modern doctrine of Evolution in its bearing upon man's nature and destiny, as contrasted with the old theological doctrine of a fallen race. The old is a doctrine of despair; the new is a doctrine of infinite hope. The old faces men to the past, the new faces men to the future. The old tells the world of a Paradise lost, the new sings forever of a Paradise to be gained. Judge, then, which is the more honoring to God; and judge which is the more worthy of acceptance by thoughtful and reverent minds.

CHAPTER III

THE EVOLUTION OF RELIGION

WE have thus far found both the world and man coming into existence by the process of Evolution. If we could carry on our study so as to make it cover man's history on the earth, we should find the law of Evolution applying to nearly or quite all of that history. Man's first dwelling was a cave, his next was a rude hut of unhewn stones or of bark. From such low and rude beginnings have come the palaces and homes of to-day.

Man's first clothing was probably leaves, grasses, and skins of animals. Everything better has been reached by a slow, gradual, evolutionary process.

At first man's food was doubtless eaten raw. It was a great event in his onward career when he learned to kindle and to make use of fire. From this beginning came the evolution, through thousands of years, of the art of cooking.

Man's first weapons for hunting and war were doubtless stones and clubs; from these the path has been a very long one to the hunting-rifle and the machine-gun of to-day. Tools and utensils of all kinds have come into existence by a very slow and gradual process. Primitive agriculture was only digging the earth with a stick in favorable spots, and dropping in seeds to take care of themselves.

The family and the domestic relations of men have been a development. So have government, civil society, and the State. The origin of speech was doubtless gradual, and the history of every language reveals constant change, usually growth. It took man thousands of years to invent an alphabet. Mathematics has been an evolution; so has been art; so all the sciences. Indeed everything pertaining to man and civilization in the world finds its place under the law of Evolution, with one possible exception. What is that? It is religion.

There are those who would draw a line at religion, and say, "Here Evolution cannot be admitted. Religion is something sui generis, special, miraculous. To give religion a place in the natural order is to destroy it."

This is the question which I purpose now to take up. Shall we give religion a place in the evolutionary process? If not, why not? If so, what is the effect? Is religion thereby destroyed? Is it injured? On the other hand,

by being put thus into harmony with the rest of man's life, is it not given new dignity and credibility? Is it not thus made more certainly a part of the great divine order?

Religion must have come into the world either naturally and by an evolutionary proccess, as art came, and knowledge, and language, and civilization, and man himself, or it must have come suddenly, at some given time, and in some miraculous, supernatural way, unlike anything else.

If we claim that it came at some fixed time and miraculously, in what direction shall we look to find the time, the place, and the source?

Many answer by pointing to the Bible. But why to the Bible, rather than to some of the other great sacred books of the world? If we were in India and inquired for the source of religion, we should be pointed just as confidently to the Vedas and the Shastras, as we are pointed in this country to the Old and New Testaments. If we were among the Parsees we should be pointed just as confidently to the writings of Zoroaster; or among the Mohammedans, to the Koran of Mahomet. But from all these claims that the source of religion is in sacred books other than our own, we instantly dissent. Do we

dissent with any clearer or stronger reasons for so doing, than the Hindu, the Parsee, or the Mohammedan dissents from our claim? Is it not probable that all of us make our respective claims for our own sacred book rather as the result of our own natural prejudices than of intelligence on the subject? If we could get rid of the bias which education and environment have given us, and see things as they really are, we should discover that religion cannot have its source in any book. A book may be a valuable conserver, but it cannot be a creator. It may be a reservoir of religious knowledge and thought, and as such very important; but to find the fountain. must we not go to the human soul, where alone God ever reveals himself first-hand? The Bible nowhere claims that it is the source of religion. On the contrary, it makes it very plain that religion long preceded the Bible. Not only was there religion among the Jewish people before any part of the Bible was written, but there was religion all around about Palestine, much of which was recognized by the biblical writers as true and good.

It is by no means certain that Job was a Jew, and yet he is counted among the Old Testament worthies, and the Book of Job has an honored place in the Bible. Balaam was

not a Jew: he came from the far East, probably from beyond the Euphrates; and yet he is set down as a true prophet of God. Ruth. who occupies an honored place among the ancestors of David and Jesus, was a Moabitess, not a Jew. Melchizedek, one of the most exalted characters of the Old Testament, who is represented as a priest of the most high God, and to whom even Abraham looked up as a superior, seems not to have been a Jew. Jesus said of the Roman centurion that he had "not found so great faith, no, not in Israel." Instead of true religion being confined to the Jews, Jesus declared: "Many shall come from the East and West, and shall sit down with Abraham and Isaac and Jacob in the kingdom of heaven." Paul told the Greeks at Athens that they were "very devout," and quoted with approval a religious utterance of one of their poets. At Lystra he declared that God "hath not left himself without witness" among any people. Peter declared to the Roman Cornelius, "In every nation he that feareth God and worketh righteousness is accepted with him." It is clear that, according to the Bible itself, religion—and religion which is true and acceptable to God-is not confined to the Jewish people, or to the Old or New Testament scriptures, or even to persons who received their religious instruction from these scriptures. The teaching of the Bible is essentially the same as that which has been so well expressed by Whittier:

"All souls that struggle and aspire,
All hearts of prayer by Thee are lit;
And, dim or clear, thy tongues of fire
On dusky tribes and twilight centuries sit.
Nor bounds, nor clime, nor creed Thou know'st,
Wide as man's need Thy favors fall;
The white wings of the Holy Ghost
Stoop, seen or unseen, o'er the heads of all."

There are those who assert that God made a primitive revelation to Adam and Eve in the Garden of Eden, and that whatever true religion there was or is in the world, previous to or outside of Judaism and Christianity, came through that. But we have only to read the Garden of Eden story to see that nothing whatever is said there of any such primitive revelation. The theory is a pure invention of a later time. Moreover, how could such a revelation have been made to a pair of children who did not know good from evil? Or, if it had been made, how could it have been handed down? But the objection which makes every other superfluous. is the fact which I have already demonstrated, that there was no Adam, no Eve, and no Eden. The Genesis narrative is simply legend, poetry, a creation of the imagination of some devout soul, and not a historic record at all. Hence, to found a theory of a primitive revelation upon it is simply to build an edifice upon a dream.

Where, then, did religion come from? Plainly it came into the world with man. It is a part of man's life. It was born out of the necessary experiences of his soul. It is no more miraculous than is art, or language, or thought, or love. Man could not be a man. in a world of human and divine relations like ours, without being religious. This is God's world. God has made it. He is in it. That Eternal Energy which is at the heart of it all, the force of its forces, the life of its life, the explanation of its law, the soul of its evolutionary processes—what can that be, but the Eternal God? It is inconceivable that man could live for a thousand centuries in such a world, where God speaks from every blossoming rose, and star of night, and beat of human heart, and not be aware, and not learn to put the shoes from off his feet in the presence of any divine manifestation.

There is nothing on the earth more natural or more inevitable than that men should be worshippers. The statement has sometimes been made that there are tribes, very low down, that have no religion. Travellers have made this statement. But probably it is a mistake. In every case where full investigation has been made there have been discovered germs of what seems to be religious thought and feeling. Man recognizes that he is not the supreme power in this world. He did not place himself here. He cannot sustain himself without much help. There is something above him. Hence we are not surprised to see the rudest savages bowing the head in fear, in awe, in worship. It may be that what they bow to is only "a stock or a stone." But it represents to their childish thought a mystery, a power, something higher than themselves. Among savage and barbarous peoples religion is necessarily crude and superstitious. It rises as man rises. Worship becomes more pure as man becomes better able to understand God and his relations to God. Religious forms change. but the religious impulse is permanent. long as man thinks and feels he must worship. If he ever ceases to worship he will have sunk into a being lower than man. The source of religion is not a book, and cannot be. It is the heart and conscience of man

It is God in the human soul.

Many men sigh for miracles as a basis for religion. They are sighing for the playthings of a child. Man in the child-stage of his development identifies God with the strange, the unusual, that which is out of the order of nature, as if something else could be diviner than nature! As man rises toward maturity of knowledge and thought, he sees that God is in the regular, not in the irregular; in the orderly, not in the disorderly. God is in law, not in the suspension of law. If law could be suspended, it would show God absent not present. As Professor Drummond has well pointed out:

"Those who yield to the temptation to reserve a point here and there for special divine interposition, are apt to forget that this virtually excludes God from the rest of the process. If God appears periodically, he disappears periodically. If he comes upon the scene at special crises, he is absent from the scene in the intervals. Whether is all-God or occasional-God the nobler theory? The idea of an immanent God, which is the God of Evolution, is infinitely grander than the occasional wonder-worker who is the God of the old theology."

Says Martineau:

"The customs of heaven ought surely to be more sacred in our eyes than its anomalies; the dear old ways, of which the Most High is never tired, than the strange things which he does not love well enough ever to repeat."

Writes Lowell:

"O power, more near my life than life itself, If sometimes I must hear good men debate Of other witness of Thyself than Thou,— As if there needed any help of ours To nurse Thy flickering life, that else must cease, Blown out as 'twere a candle, by man's breath,— My soul shall not be taken in their snare, To change her inward surety for their doubt, Muffled from sight in formal robes of proofs. While she can only feel herself through thee, I fear not Thy withdrawal. More I fear, Seeing, to know Thee not, hoodwinked with dreams Of signs and wonders, while unnoticed, Thou, Walking Thy garden still, commun'st with men, Missed in the commonplace of miracle."

Men sigh for a divine revelation full-orbed at once—for full knowledge of God and spiritual things from the beginning. They are sighing for the impossible. The acorn must come before the oak, the babe before the man. Growth is the law of the world in which we live. If man begins on a low plane with other things, he must begin on a low plane with religion. Go to a savage, and try to teach him high ideas of religion. You can no more do it than you can teach him high ideas of art, or science, or philosophy.

When you have partly civilized him, and given him some degree of intelligence about other matters, then you may give him advanced ideas about religion; not before. So that in the nature of the case the only revelation which it was possible for God to make to man, was a gradual and continuous revelation from low beginnings. That is exactly what he has made. The evolution of religion in the world has been God's growing revelation of the divine to man and in man, as man has become capable of recognizing it.

We shall understand better the real significance of the evolution of religion, if we try to get a little clearer conception than we have yet done of the beginning from which it started. As already intimated, we cannot conceive of a time so far back that man was not conscious of powers around and above him greater than himself, which he could not command and on which his life more or less depended. Storms beat upon him, against which he had little protection; the sun shone upon him, now with genial warmth, and now with deadly heat; wild beasts attacked him and carried away his children; floods swept away his habitation built on the river bank; the avalanche thundered down the mountain, destroying without mercy all in its path; the seasons marched past him in their order, with their heat and their cold, their abundance and their emptiness. Accidents came to him that he could not avert, sickness which he could not understand, and, strangest of all, death, an enemy with which he could not cope.

All these things spoke to him of powers mightier than himself, that environed his life, and more or less controlled it. As he was himself a living being, why were not the running river, the restless sea, the sun, the moon, the storm, the avalanche, yes, and the tree that gave him shelter and food, also living beings? With nature all around him so wonderful, so mysterious, so full of hidden energy, so alive, is it strange if he came early to think of all the more striking objects of nature as in a sense divinities, or if his earliest religion was some form of nature-worship?

But this does not seem to cover the whole ground. From still another source early peoples seem to have obtained ideas of gods and of spirit existence. As men to-day see shadows, so did early men. The tree cast its shadow. Was not that shadow a second tree, a sort of double of the first, a ghost or spirittree? Men walking in the sun cast shadows.

Were not those shadows other selves, spiritselves? Men looking down into still water saw images of themselves. Were not those images real persons? Men dreamed, and in their dreams saw their friends who had been long dead. Did not this mean that their friends had second selves which did not die? Here, clearly, an early basis was laid for a belief in spirits. And the ability of these spirits to come and go, to appear and to vanish, to pass through the earth or the water or the air at will, as physical bodies could not, seemed to give them a certain superiority, and therefore a claim upon man's homage. Something like this appears to be the explanation of the origin of that religion of spirit-worship, in its various forms of animism, fetichism, totemism, polydæmonism, worship of tutelary deities and of ancestors, which we see among uncivilized races at the present time, and which, because we see it among uncivilized races to-day, we have a right to believe was essentially the religion of primitive peoples.

Of course to early man these spirits and nature-powers could have seemed to have little relation to one another. Each was isolated, each was independent. Each had its own habitat or province; generally each

was associated with some individual object. They might be friendly with one another or they might be hostile. Some were very powerful. Some were relatively weak. Some were good, some were bad. Some were friendly to man, some were inimical to man.

Of course the great thing aimed at by the worshipper was to avert the anger or gain the favor of these spirit powers. He thought to do this in many ways, most often by gifts of food or other things which he supposed the spirits would prize; by making sacrifices, sometimes very heavy and painful, even involving human life; or by incantations, the repetition of sacred words, or the performance of certain magical rites, which he believed would give him power over the spirits.

Something like this was probably the beginning of man's worship and religious life. It is difficult to realize how very crude and low and poor it was. Out of anything so unpromising can there come a religion which will be high, pure, intelligent, ennobling? Let us not be faithless. The journey will be long, but it will not be so long as more than one that Evolution has already seen accomplished. If the advances from firemist to amæba, and from amæba, to man, have already been achieved, then surely the

advance from this low beginning of religion to the Sermon on the Mount is not incredible.

Let me try to indicate very briefly the path along which the evolution of religion in the world seems to have moved. As to man's conception of God, it has moved from the narrowly local, first to the tribal, then to the national, and finally to the universal. From that which was very limited in power and wisdom, it has moved slowly to that which was less and less limited, until at last it reached the thought of God as omnipotent and omniscient. From diversity it has moved ever toward unity; that is, from gods manywe may almost say everything a god—it has moved steadily toward the thought of God as one, over all, through all, and in all. From gods without moral character, it has moved on and up to a conception which at last endowed the Divine Nature with the highest ethical attributes. Worship, which at first was scarcely more than fear, and selfish desire for protection and for material advantage, gradually rose until it became gratitude, love, trust, and adoration of the morally worthy.

In other words, religion has developed from the lowest and crudest forms of nature worship (or worship of spirits identified with natural objects), as seen in animism and fetichism, to polytheism, or the thought of gods more or less distinct from nature and independent: then to higher and higher grades of polytheism, in which the gods became more powerful, wholly anthropomorphic instead of therianthropic, and began to gain moral characteristics then from polytheism up to the worship of one God alone, but without conceiving of him as universal. or denving the existence of other gods; then to real monotheism, or the belief that there is only one God; and, finally, to ethical monotheism, or ethical theism, or Christianity which conceives of God as infinite in power and wisdom and possessed of all moral perfections. Thus we have the culmination of all in the thought of God as one and holv. whose worship is the pure heart, and especially in the thought of God as the Universal Father, whose worship and whose service are love. Higher than this, man's thought of God, and of man's relations to God, cannot rise. Here is the white summit which kisses heaven.

Now what has caused all this splendid growth of man's conception of the Power above him? Has the evolution been an accident? It has been no more an accident than man himself has been an accident. It has been no more an accident than God is an accident. Given a rational mind unfolding in a universe full of God, as this is, and to such a conception of God sooner or later it must come, because such a conception is true. The universe declares it true, and the universe cannot lie. This conception of God the universe has written on man's soul: nav. this conception God himself has graven on man's soul, with a graver's chisel which has been nothing less than all man's experience on the earth—experience in the midst of an environment from no atom or pulse-beat of which God has ever for one moment been absent.

But religion has to do with more than man's relations to God. We live in a world of human relations, as well as divine, and these too, religion must concern itself with. Has there been an evolution here also?

Plainly yes. Everything shows that man began his history in the world with well-nigh as imperfect conceptions of his duties and relations to his fellow-men, as to God. Just emerging as he was from the brute life below him, the appetites, propensities, and passions which characterized that brute life were clinging tightly to him. The long climb

which was before him, from the animal to the complete man, far off and far up, beyond his sight—how long and hard a climb it was to be! But he entered upon it. A thousand times he fell; but he rose again. A thousand times he took the wrong path, often wandering far, but at last he found the right way once more. Many a time he went back, losing precious ground that he had gained. But at last his better, stronger, diviner self prevailed, and he pressed on again. Years passed into centuries, and centuries into millenniums; he was still advancing; his face was still toward the heights. We can now see what he has achieved.

He has learned something of what right means. He has learned something of what justice means, and duty and kindness. He is beginning to learn not to steal; for if he steals from his neighbor, his neighbor will steal from him; and thus all his possessions, such as he has, become insecure. He is beginning to learn not to kill, but to respect human life—otherwise there is no security for his own life. He is beginning to learn, by experience long and dearly purchased, that truth is better than falsehood. By experience not less long, and much of it not less bitter, he is beginning to learn that marriage is

better than promiscuity, and chastity than unbridled lust. Parental love and love for wife and friends have come into his soul. They are crude and poor yet, but they are clearly there, and they give promise of something very beautiful. Germs of pity and gentleness, of fidelity and truth, of nobleness and honor, and all the high moral qualities which will one day make human society a kingdom of heaven, are growing within him. He is yet far from the angel; but thank God, he is also far from the brute. And so he struggles on and up, toward the shining goal.

Such is the evolution of religion on its human side. It is only another name for the evolution of manhood, the evolution of the true and loving home, the evolution of the ideal society, the evolution of the just State.

I asked what caused the evolution of religion on its God-ward side. Let us now ask, What has caused this that is going forward on its side toward man? Has it been an accident? Some lines written by one of the most distinguished of living American scientists shall at least hint an answer:

"A single thought Divine
Holds stars and suns in space.
A dream of man is Thine,
And history finds its place.

When the universe was young
Thine was the perfect thought,—
That life should be bound in one
By a strand of Love enwrought.
In the life of the fern and the lily,
The dragon and the dove,
Still through the stress and struggle
Waxes the bond of Love.
Out from the ruthless ages
Rises the incense mild,
Love of the man and the woman,
The love of mother and child!"

Such is the answer of a scientist to whom has come a vision of the larger God and the deeper meaning of the Universe which the thought of Evolution offers.

Here is a further answer, similar, from a preacher, a poet-preacher, whose eyes also are open to see the profound and far-reaching religious significance of the evolution conception:

"Shy yearnings of the savage,
Unfolding thought by thought,
To holy lives are lifted,
To visions fair are wrought:
The races rise and cluster,
The evils fade and fall,
Till chaos blooms to beauty,
Thy purpose crowning all!"2

¹ David Starr Jordan.

² W. C. Gannett.

Looking back over all this evolution of the human best in man, shallow thinking may say, Accident! Profounder thought says, There can have been no accident. All has been part of the Eternal Order. Evolution is God's plan of things. All evolution on this earth, so far as we know, culminates in man. Man culminates in the moral and the spiritual. These must at last become dominant in his life, and love must crown all. Then, but not before, will he be a complete man, a man after "the measure of the stature of the fulness of Christ."

Nor can the evolution stop with the individual: it must extend itself throughout society. Social, industrial, and political evolution must continue until the moral is everywhere dominant in social relations, in business, and in the State.

Says Herbert Spencer:

"Human progress is not an accident, but a necessity. Instead of civilization being artificial, it is a part of nature; all of a piece with the development of the embryo, or the unfolding of a flower. The modifications mankind have undergone, and are still undergoing, result from a law underlying the whole organic creation; and provided the human race continues, and the constitution of things remains the same, these modifications must end in completeness. As surely as the tree becomes bulky

when it stands alone, and slender if one of a group; as surely as the same creature assumes the different forms of cart-horse and race-horse, according as its habits demand strength or speed; as surely as a blacksmith's arm grows large, and the skin of a laborer's hand thick; as surely as the eye tends to become long-sighted in the sailor and short-sighted in the student: as surely as the blind attain a more delicate sense of touch: as surely as the clerk acquires rapidity in writing and calculation; as surely as the musician learns to detect an error of a semi-tone amidst what seems to others a very babel of sounds; as surely as a passion grows by indulgence, and diminishes when restrained: as surely as a disregarded conscience becomes inert, and one obeyed active: as surely as there is any efficacy in educational culture, or any meaning in such terms as habit, custom, practice; so surely must the human faculties be moulded into complete fitness for the social state; so surely must the things we call evil and immorality disappear; so surely must man become more and more perfect."1

Such a perfecting of man and such dominance of the moral in society will mean nothing less than the establishment on the earth of what Jesus called "the kingdom of God."

Of course most of the moral and religious evolution which I have been endeavoring to sketch in this chapter took place before historic time. But the process has continued

¹ Social Statics, p. 78 f.

right on since recorded history began, and is going on still. Nor is there reason to believe that it will cease in any discernible future.

Perhaps the most remarkable record of religious evolution on a large scale that we have is the Bible. This will be considered more fully in a subsequent chapter, but a word may be said concerning it here. The whole story of the Hebrew people in Palestine is the history of the evolution of a religion. The Bible is both the outcome and the record of that evolution for a thousand years. An important part of the Bible's value lies in the fact that it is a record of religious evolution for so long a time, on so large a scale, and under so exceptionally favorable circumstances.

If the religious evolution of the Hebrew people attained at last a splendid height, we must not forget that it began very low. It began in polytheism. Jehovah was thought of as only one of many gods. Other lands and peoples had their gods; Jehovah was the God of the Hebrew people, whom they must worship because he was theirs. The struggle up out of polytheism and the worship of other gods besides Jehovah, to the worship of one God alone, was long and difficult. Even a king like Solomon built altars and shrines

to other gods. Not until well-nigh five hundred years after Solomon's time was the polytheism entirely gone.

Moreover, the character ascribed to Jehovah in the earliest times was low, cruel, vindictive, almost wanting in moral elements. We are told of his demanding not only bloodiest animal sacrifices, but human sacrifice. He commands the slaughter of men, women, and helpless, innocent children. The pictures given of him in the Book of Judges show how low and imperfect a conception of the divine character the Hebrew people had when their history, as recorded in the Bible began. But in every age there was advance. No age was without individual men who believed in truth and right and justice; men who had attained to higher ideas of God than their fellows: men who listened to the voice of God speaking in their souls, through reason and conscience. Because these seers, these prophet-souls saw with clearer light than their fellows, and had the courage of their convictions, they were able to lead the nation on and up to higher moral life and worthier views of God and religion, until at last the splendid moral and spiritual heights were attained which we see in the Psalms, in Isaiah, and in the New Testament.¹

But if the history of the religion of ancient Israel was an evolution, not less has the history of Christianity been also an evolution.

Indeed no careful investigator can doubt that the law of religious evolution is operative in the world to-day on a far wider scale and with far more conspicuous results than ever before. I think I should not overstate if I said that the past century has witnessed more important religious advances in the world than any single century, if not than any five centuries, of the past. And I believe all the indications are that the next century will witness advances greater still.

How are we to help on the evolution of religion in the world? By helping on the progress of all knowledge, all truth, all good. Religious evolution cannot go alone. It must go hand in hand with enlightenment. The moral is insecure without the intellectual. In a low civilization religion must be low and crude. As knowledge and thought advance, religion rises to greater purity. In an age

¹ For a fuller treatment of the evolution of religious ideas among the ancient Hebrew people, as shown in the Bible, see the author's book, "The Origin and Character of the Bible," The Beacon Press, Inc., Boston.

of ignorance, superstition, and credulity, religion can hardly rise above the low plane of magic and priestcraft. In the middle ages the religion of Europe was dark, because the intellect of Europe was dark. The chief work accomplished by Luther was that of letting in light, and freeing the minds of men. When men began to think, the quality of their religion began to improve. If to-day the religion of Protestant Christian lands is the best in the world, it is because the intelligence of these countries is the highest in the world.

The practical lesson of all this for men who love religion is, Foster education; spread abroad useful knowledge; promote science; maintain schools and colleges; establish libraries; encourage free thought. Be not afraid that these will destroy or injure religion; they will purify it, ennoble it, and save it.

It is difficult to think of anything more unreasonable than that intelligent men should fear the doctrine of Evolution. And yet many are afraid lest it injure religion. They could not be more shortsighted. Evolution would not be God's plan of things if it were not wise and safe. It is God's method by which in all the past he has been turning seeming evil into good, and good into better.

Let us have faith; by the same divine method he will yet turn better into best.

We are sometimes asked, will not man eventually outgrow religion? The best answer to this question is Evolution. What has been in man from the beginning will be in him to the end. Especially what is highest in him we may be sure will not be outgrown. He will get purer and better religion; he will not be content with less religion. As man rises in civilization he learns to prize the best things more, not less. He learns to give more attention to knowledge, to books, to nature, to art, to music, to everything that enlarges and enriches his life. Therefore we may be sure that he will not turn his back upon religion, the greatest enlarger, the greatest enricher, the greatest ennobler of life, that humanity has ever found in all its long history. No, the future of religion is secure. And the pledge of that security is God's great divine law of Evolution.

CHAPTER IV

THE PROBLEM OF PAIN AND EVIL IN THE LIGHT OF EVOLUTION

THE problem of Pain and Evil is a very serious one. It meets everybody. He who has not been troubled by it, who has not at some time wrestled with it, and tried to find a solution for it, has never done much thinking, and knows little about the earnest side of human life.

The little child almost before he can walk or talk begins to meet the problem. Why does he fall and bump his head? Why does the fire burn him? Why does his toy horse break when he strikes it with a stick? Why does not his mother always let him have what he wants? These are the forms that the problem of evil takes to the experience of the child.

As he gets older it takes other forms: Why must he go to school, or work, when he would rather play? Why is he sometimes sick? Why did his friend and companions move away to some distant place, or die? Why do accidents happen to people? Why do

evil thoughts come into his mind—thoughts of anger and hatred and selfishness—when he tries to keep them out?

And then, as he grows to manhood's estate. the problem still confronts him in ever changing forms: Why are there poverty and vice and crime in the world? Why tornadoes, and destructive floods and earthquakes and untimely frosts, and blight and mildew of crops? Why railway and steamship disasters? Why wars and tyrannies? Why is the battle of life so severe? And why can no one escape it? Why do disappointments and wrecks of hopes come to men? Why do men grow old? Why does death come to old and young alike? What does death mean? Why are there such things as pain and suffering and death in the world at all? Why is not human life a long day of sunshine and happiness, and immunity from pain, and freedom from toil and care, and fruition of all one's hopes? Could it not just as well have been so? If God were good would he not have made it so? Such thoughts as these come to all earnest minds. What shall we do with them? The only way we can find peace is by facing them, thinking them through, and getting for ourselves a philosophy of life large enough and complete enough to have within

it a place for them all. When once we have attained a view of the universe, of God and of human life, sufficiently comprehensive to gather up into itself all these forms of seeming evil, and build them as stones into an edifice of universal good, then, but not before, will their power to hurt us be taken away.

Can this be done?

Thinkers in all ages of the world have attempted the task. Some have reached one conclusion, some another. Some have offered systems of philosophy which they believed accomplished the end desired. Others have given up in despair, and declared that the presence of evil in the world means either that God is not almighty, or else that he is not good. Epicurus, the philosopher of Greece, put the matter in this way: "Either God is willing to remove evils and not able, or else able and not willing, or neither able nor willing; for if he be both able and willing, whence do they come?"

John Stuart Mill has drawn a terrible picture of nature marching straight to her ends without regard to what or whom she may crush on the way. Says Mill:

"Nature impales men, breaks them on the wheel, casts them to be devoured by wild beasts, burns them to death, crushes them with stones like the

first Christian martyr, starves them with hunger, freezes them with cold, poisons them by the quick or slow venom of her exhalations, and has hundreds of other hideous deaths in reserve, such as the ingenious cruelty of a Nero or Domitian never surpassed."

This is a terrible arraignment of nature. Is it true? If it is, does it compel the conclusion that the God of nature is not good? The conclusion that Mill himself reaches is, that the limitation is on the side of God's power. He thinks we are not necessarily driven to deny the goodness of the Creator; but we must conclude that he is not omnipotent. In creating and carrying on the physical universe God is compelled to use matter and force. But these have a nature of their own and properties of their own, which limit the divine power. It is to this limitation of his power in respect to nature, therefore, Mr. Mill believes, that we are to attribute the cruelty which we see in nature, and not to any purpose or wish of cruelty, or any lack of goodness, on the part of the Creator himself. Is this the true view? It is an intricate as well as a serious problem, but I do not by any means think it hopeless.

First, the great thinkers of the past who have studied the problem of evil, though they may not have wholly solved it, have thrown

great light upon it, and light which is of value to us. It will be of service if I can offer some of that light. Second, and still more important, since most of these thinkers wrote, a great new thought has come to the world, which I believe is proving a key to this problem to a greater extent than any previous thought has ever done. It is our modern conception of Evolution.

I do not mean that all the darkness which has so long enveloped the questions of pain and sorrow and evil in the world has been driven away by the evolutionary philosophy. Much still remains, and probably always will re-Man is finite, while God is infinite. main. The plans and purposes of the Infinite, we. with our limited powers cannot hope to understand, more than in very small part. And vet if Milton might undertake to justify the ways of God to men, as regards the matter of sin and evil in the world, before the light of Evolution shone, it surely is less presumptuous to attempt the same now. helped by the far-reaching illumination of this great conception.

The solution of the problem of evil which has long been the generally accepted one in Christendom, is that which postulates the doctrine of a fallen and ruined race, based upon the Old Testament story of the temptation and disobedience of Adam and Eve in Paradise. It is claimed that here we have a true account of the origin of sin and suffering in the world.

Let us examine this claim. Let us see whether the Paradise story really explains anything. And let us compare the light which it has to throw upon the problem of evil and pain with that which comes from the doctrine of Evolution. To do this it will be necessary for us to pass over a very little ground traversed in a preceding chapter. But this need not trouble us, since we shall do it by a different path and with different ends in view.

We read in the Book of Genesis that the earth and man were created good. The inference is that there was no pain, no suffering, no death, among men or animals, until Adam and Eve, tempted by a talking serpent, which the Christian world has generally regarded as an embodiment of Satan, ate the forbidden fruit. We are told that as a result of that disobedience God cursed the serpent, condemning it henceforth to go on its belly, and to eat dust. He cursed the ground, that it should bring forth thorns and thistles. He cursed woman, that she should be in subjec-

tion to her husband, and bring forth children in labor and sorrow. He cursed the man, that he should eat his bread in the sweat of his face, and by and by die. Thus we have death introduced into the world, and every kind of evil. And, if we admit the conclusions drawn by the dominant theology of Christendom, thus we have the whole human race morally ruined, and a very large proportion of it doomed to endless perdition.

In the light of present-day knowledge, is this a satisfactory explanation of the origin of the evil and suffering that are in the world?

In our preceding studies we have found that, as a fact, there can have been no literal Adam and Eve. Man came into existence tens, perhaps hundreds, of thousands of years earlier than the Genesis account contemplates. He came into existence, not by a sudden act of creation, but by an evolutionary process. The Genesis stories of the creation, the Paradise-garden, the temptation, and the fall, are legends, and not historic narratives. In the nature of the case, therefore, it is folly to seek in them the cause of evil and pain in the world. Indeed, with the disappearance of Adam and the fall from the world of reality, all theological doctrines based upon

them crumble into ruins and become worthless.

But there are other difficulties with the story of the fall besides its unhistoric character. It pictures to us a world such as does not exist, never has existed, and cannot exist in connection with a law-governed or a moral universe. The story represents everything as arbitrary. Nothing is under law; there is no attention paid to the nature of things; there is no relation of cause and effect: there is no moral order and no justice. If the story had said that as the result of the eating of the forbidden fruit Adam and Eve had suffered bodily illness, or even if it had gone so far as to say that they died, and if the story had stopped with that, we could see some rationality in the assertion, some relation of effect to cause. But when we are told that the first pair were forbidden to eat a certain fruit, and then because they ate it they were driven from their home and were doomed to death; that all their innocent descendants were also doomed to death; and that the earth, which had done nothing wrong, was cursed, we cannot but feel that we are in a realm where the laws of cause and effect do not operate and where there is no moral order and no justice.

What justice could there be in placing the first human pair in circumstances such that a single mistaken act would ruin their lives irretrievably, not to say ruin all their descendants? What were they—these two—but children? They had no experience. God had told them not to eat; if they did they would die. But they did not know what dving was. Another being, who seemed to them as friendly as God, and who for aught they knew might be as wise, came to them in the form of a serpent and told them to eat, saving that they would not die, but would grow wise and become as gods. How could they tell which was speaking the truth? Surely wisdom was desirable. The serpent therefore seemed to offer them the greater good. So they did as the serpent said, and ate. Was there anything strange in that? Could it have been an act of very deep guilt? Let two little children to-day under like circumstances commit an act of disobedience, and how heavy punishment would any intelligent and just parent inflict upon them? Then on what principle of justice or reason could God decree that, because of a single failure to obey on the part of two children of the early world, not only they but all mankind should fall (to quote the language of the Westminster Catechism)

"under his wrath and curse," and so be made "liable to all the miseries of this life, to death itself, and to the pains of hell forever?"

Thus we see that nothing is really explained by the Genesis story. Rather is the confusion deepened. We are simply left with moral and physical evil in the world, with seemingly no good reason, and no purpose to be served by either, and no one really responsible but God. The attempt to shift the responsibility upon Adam breaks down utterly; for who made Adam? Who placed him, without any experience or moral strength, in a situation where he would be subjected to a temptation greater than he could resist? The attempt to shift the responsibility upon the tempter breaks down as completely; for who made the tempter? and who permitted him to enter the garden, and to ply his arts upon his defenceless victims? And then, the enormity of hanging the fate of the world upon the issue of such a trial!—if they yielded—these inexperienced two - the result, a ruined race! and an endless hell for untold millions! Did the mind of man ever conceive anything more irrational or more shocking?

So much for the Genesis story of the fall as a solution of the problem of evil.

And now, let us turn from the old to the

new; and from Paradise tragedy and the theologies founded thereupon, to the doctrine of Evolution. What light has Evolution to throw upon the problem of sin and evil and pain in the world?

It is sometimes complained of Evolution that its conception of the origin of evil is not serious enough. In this respect some persons suppose it to contrast unfavorably with the old thought.

I believe this is an error. What we have already seen, I think, should show us that it is an error. It is the Genesis story and its associated theology that make the origin of evil light and trivial. Think of trying to explain the sin and evil and pain and suffering in the world during all the centuries past and to come, by the child-mistake of an Adam and Eve! As if so slight a matter as the eating of an apple in disobedience to a halfcomprehended command could account for the origin of the cruelty, the hate, the revenge, the selfishness, the brutality, the slaveries, the wars, the crimes that have blackened and still blacken the earth! It does not even begin to account for them. We must go infinitely deeper down, and into a region of infinitely more solid realities, before we find an explanation that is sufficiently serious, or, as we

have already seen, that really explains anything. In other words, we must go to Evolution. Ask of Evolution whence come the hatreds, the greeds, the revenges, the selfishnesses, the brutalities, the wars of men, and the answer you get will not be, They are the result of a momentary act of inexperienced children in a Paradise garden; but, They come out of a thousand centuries of lower animal life. They are the traces of the beast surviving in man. They are the heritage of untold ages of selfishness and greed and blood and slaughter in that brute world from which man has sprung, and of hundreds of thousands of years of fierce semi-human life while he was climbing toward the full human; while yet the selfish struggle to preserve his own life was well-nigh all, and before the nobler struggle to preserve the life of others, and therefore the social and moral element in his own life had come in.

Here you have an explanation both of the origin and the nature of evil that is sufficiently serious. Here you have an explanation that goes back and down to the roots of things, and that explains. No wonder the greed and self-ishness and cruelty and all the brute passions of man are such terrible realties, and fight such battles against the higher forces of his

nature, and require so hard battling to overcome them, when they came into his life through so long an ancestry!

What is evil? The reply of Evolution is, Evil is animalism. It is all that old brute world seeking to keep its ascendency, warring against the coming dominion of the soul. It is matter refusing to yield to spirit. It is the lower refusing to move up higher.

It is what St. Paul described with such power in Romans, seventh chapter, as the war which he feels going on in himself, between his lower and his higher natures, between the flesh and the spirit, between the animal nature, with its appetites and passions, and the spiritual man, with its aspirations and ideals: "I see a law in my members warring against the law of my mind, and bringing me into captivity to the law of sin which is in my members. . . . Who shall deliver me from the body of this death?"

In the light of Evolution evil is relative, as good is. Evil is incompleteness. Evil is an incident, not a finality. If we can understand the expression in a large enough way, evil is good in the making; it is the green apple; it is the partly painted picture; it is the building in process of erection. Evolution says, The world was not created perfect and complete.

It began its career away back in time farther than the mind can think. The creative process has been going on ever since, and is going on still. Thus the world rises in complexity of conditions, and in quality of life. There are, incident to its changes and its progress, a thousand things which, looked at in some aspects, are evils, but yet which have a part in helping on the advance, and hence in achieving the larger results of good.

Of man Evolution says. He was not created at first in a state of physical, mental, and moral completeness, from which he fell into a condition of ruin. Instead, he began his career far down. From his first low condition he has, somewhat haltingly and irregularly, but on the whole persistently, advanced until he has become what we now see. Evil manifests itself in the mistakes which he makes as he gropes his way onward and upward. Especially is evil the tendency in him to choose the lower instead of the higher, to cling to the old heritage which comes to him from the brute, instead of relinquishing that to lay hold of the better things which make for manhood.

Thus in Evolution we begin to find a basis for a faith in God that is not shaken by the existence of evil in the world, because it has a philosophy which sees that even evil — temporary evil — may serve ends of good beyond itself, and help build a larger structure which is not evil but good.

In the light of Evolution no evil, however severe or terrible, necessarily means a God who does not care for men. Even earthquakes, cyclones, floods, and conflagrations do not necessarily mean either want of goodness or want of power on God's part. They simply mean that the world is under law. And if law is good, then the fact that the universe is under law is a proof that God is good.

Is law good? Let us suppose a universe under law and another not under law; which would be the better, and the better for man? To ask the question is to answer it. Man simply could not exist in a universe without law; nay, the universe itself could not exist, as a universe; it would instantly become a chaos. Thus if it was kind for God to create man at all, it was kind to put him under law.

What is an earthquake? It is simply a world going through its evolutionary process of cooling and contracting under law. What is a tornado or a cyclone? It is simply the wind moving under law amid such conditions as sometimes arise on a planet like ours. What is a conflagration? It is simply fire

obeying the laws of its own nature under certain conditions. These calamities may destroy property, or even life, but that does not mean that God is cruel, unless putting the world under law—that is, creating it at all—was cruel.

Men talk very strangely about God, as if he could both do and not do at the same time. They want him to create fire under law, and vet not let it burn their goods or their houses. when it comes in contact with them. They want water to remain water, and yet not drown them when they fall into it. They are simply asking for contradictions - for what is impossible in the nature of the case. They are asking something as insane as that two and two should be five; or that a part should be greater than the whole; or that a straight line should not be the shortest distance between two points. They are asking that the universe shall not be rational, which is only another way of asking that it shall not exist.

Of course we may suppose that God could save persons from all accidents and calamities by working special miracles in their behalf. But what kind of a world would we have if a miracle were wrought to save everybody from every kind of danger, calamity, and harm? What would become of our law-governed

world? And would it be so good for man? If we knew that some guardian power were watching over us, to protect us from every possibility of danger or harm, would it not destroy our foresight, our alertness, our power to care for ourselves, and thus prove a far greater harm than good? What has made us men, but thought, care, foresight, guarding against the breaking of law, planning for ourselves, standing on our own feet?

Sicknesses, and especially epidemics, are often pointed to as evidences that God is heartless; if he is good why does he send these evils upon men? The answer is, Many illnesses are the result of man's ignorance or carelessness. Nearly all epidemics are. We should blame men, therefore, and not God. Even where we cannot discover the cause of illness, there probably is a cause somewhere in some violation of a law of health by the sufferer or his ancestors. The law is God's; the violation is man's. So, then, it is still our duty to blame man rather than God.

We are apt to complain of pain as if it were an evil. Really it is a good. It is nature's signal of danger. It puts us on our guard. It tells us that the part where the pain is needs rest or help. And so through the kindly monition of pain our lives are often saved. Men complain of poverty, and hardship, and struggle, and often say in bitterness, Why does God send them upon us? The truth is, men often bring these on themselves. But even when they do not, why should they see in these things a sign of God's want of love or care? It is poverty, hardship, and struggle that have built up a large part of the strongest life and noblest character of the world. Men who never have to struggle grow inactive, ease-loving, weak, and find themselves far outstripped in achievement and in the race of life by those who are spurred to energy by hardship.

Cold and suffering are spoken of as evils. But cold and suffering have created the home: cold, by driving families in-doors, and around a common hearth; and suffering, by calling forth the tenderness, sympathy, and love which give to home its sacred character.

The long, helpless childhood of the human infant—so much longer and more helpless than that of almost any other creature—seems when looked at superficially to be a great misfortune, and an indication that the Creator's plan of things is bad. But really the prolongation of infancy is what has made humanity. The utterly dependent condition of her babe for so long a period has awakened

the maternal instinct and created that finest. highest product of the race, the human mother. The dependence of his children, too, has developed the man into the father: while the extended period of growth of the children, and their long continuance in the home before going out to make a living for themselves, have given them such training, and enabled them to acquire so large a part of the knowledge and experience of their parents, as have given them a tremendous advantage over every other form of animal life, and carried mankind forward and upward to an amazing degree. It is hardly possible to estimate the value to the race of this seeming evil—the helplessness. the slow development, and the long need for care and protection, on the part of the human child.

Thus we see how many things there are which, looked at superficially, seem evils, but which, examined more carefully, turn out to be priceless blessings.

Perhaps the severest indictment against nature that can be made at all is that which we are prompted to make on account of that relentless struggle for existence which has been going on during all the history of life on the planet. Truly nature has been "red in tooth and claw."

"Then marked he how the lizard fed on ant, and snake on him,

And kite on both; and how the fish hawk Robbed the fish tiger of that which he had seized,— The shrike chasing the bulbul, which did chase The jewelled butterfiles, till everywhere Each slew a slayer, and itself was slain."

Such a state of things has led many to ask if there can be a God of goodness in the universe. But even here we are not left without some light, if we will look for it. There can be no question that out of this very struggle there has come a vast advance in the world, and therefore a vast good to the world as a whole. It is through this struggle that the fittest have been selected to survive, and thus progress on a world-scale has been secured. Man's existence is due to this struggle. The only question is regarding those innumerable lives that have been sacrificed in the struggle, to make the advance possible, and prepare the way for man. Has the price that has had to be paid for the advance, and for man, been justifiable? The reply is, When we consider what mind and soul mean, it seems hard to think of a price too great to pay for them.

As to the *cruelty* of all this sacrifice of life, this is to be said: All these innumerable creatures had life given them and enjoyed it for a season. Was it not better, kinder to

them, to let them live and die than not to live at all? And die they must have done anyway, even if there had been no struggle for life and no foe. Would death by old age and decay have been kinder than by devouring fellowcreature? It is doubtful. Sudden death is probably the most desirable of all deaths. Persons who have been nearly killed by lions and tigers tell us that the process was almost wholly painless. Thus it is probable that the very process of animal feeding on animal, whereby the weakest have been eliminated and the fittest have been made to survive, has resulted in less suffering than would have taken place if there had been no carnivora in the world.

This fierce struggle for life went on until man came on the scene. It built his body; but it could not build his soul. For that there must be wholly new agencies, and new agencies came. That beautiful struggle for the life of others began, which has endowed the human race with sympathy, care, unselfishness, and love, and which will not cease till all the sorrows and pain that afflict humanity are cured.

Of course it is very easy for men to find fault with the plan of things, if they are shallow men, or, if they are very shallow, it is easy for them to declare that they could devise a better. But thoughtful and profound minds stand in wonder and awe at the world as it is—especially as it is revealed in the light of the marvellous evolution through which it has come, and which is still bearing it on to greater things.

Certain it is that the thought of the development of the world under law has been the one illuminating conception of our century. shedding light everywhere. Not least illuminating has been its light upon the problem of evil. By showing us that the world is not made, but making, and that even man is far from finished, the thought of Evolution lets us see that much which we have called evil is not evil. It is only incompleteness. It is a building in process of erection. It is an engine with one part making here, another there, another yonder. By and by the parts will be gathered together into a whole; then we shall see their meaning. Evolution says. Wait; have faith; God has plenty of time; the consummation will appear, largely in this world, fully in another.

The kind of evil that now most hurts this world is moral evil. What is moral evil? The root of it is selfishness. Once selfishness was not an evil. In the brute fighting his physical

battle, it was a good. But man has risen to something higher. He must live for wife, child, friend, neighbor, country, the world. That is the very condition of his manhood. To live for self alone is to gravitate back to the old brute condition.

For man's moral evolution to get a start was a process inconceivably slow. But every step of its advance made the next step easier. How long it took nature to create a mother! How long a father! How long a friend! How long a lover of humanity! Now we have millions of mothers, of fathers, of friends, of lovers of their fellow-men, to help forward the higher life of mankind. Thus the world moves on with accelerated and fast accelerating speed. This means greater things for the future than we understand.

Looking around and seeing the many evils in society, we sometimes shudder and are tempted to discouragement. We ought rather to be encouraged because we see the evils. They have always existed in society. At last we are getting our eyes open so that we can recognize them as evils. Many evils have already been destroyed, more must be, will be. The great movement of the world's evolution on the social and ethical plane will not go backward. No wrong, however hoary, has

any sure lease of life. Only the right and the good can permanently endure.

No, it is not a fallen world that we are in, but a rising one. Eden is not behind, but before. Man's great day is coming, not past. There has been no wreck of God's great plan of things, but a steady carrying forward of all the acts of the sublime drama from the beginning until now. And what has been is a pledge of what will be.

Doubtless the philosophy of Evolution needs, to complete it, the thought of Immortality, to carry the process begun here in the individual on and up to its full consummation in another life, and also to make good any seeming injustices that may not have been set right in this world—a thought to which Tennyson gives powerful expression in his little poem "The Play":—

"Act First, this Earth, a stage so gloomed with woe You all but sicken at the shifting scenes.

And yet, be patient! Our Playwright may show
In some Fifth Act what this wild Drama means!"

I believe that immortality is the legitimate and necessary goal and crown of Evolution. But this will be the subject of my next chapter, and hence requires only mention here.

In conclusion let me say: Standing with eyes open to see every dark and cruel thing that is or ever has been in the world; facing all evil, all wrong, all pain, all suffering; listening fully to every complaint and every indictment that can be made against nature and her cruelty, and against man and his injustice to his brother — I still believe that we have a right to sing with Browning:

"This world's no blot for us,
No blank; it means intensely, and it means good."
"God! Thou art love! I build my faith on that.
So doth thy right hand guide us through the world."

I believe that Lowell saw deep below the surface of things, deep into the heart of reality, when he wrote:

"All of God's angels come to us disguised.
Sorrow and sickness, poverty and death,
One after another lift their frowning mask;
And we behold the seraph's face beneath,
All radiant with the glory and the calm
Of having looked upon the front of God."

Deeply understood, I believe there is nothing really to disturb, but everything to support, the faith—the most uplifting ever cherished by man—that we all, and all the world are in the hands of One who has the wisdom and the goodness to plan the best things, and the power to carry them out.

We need not be discouraged by any evils that still remain in the world. Rather should we be mightily encouraged by the unmistakable signs that evils are lessening. All we need be troubled about is lest we fail to ally ourselves with the forces of light that are making the evils fewer.

Our business in life is to be workers with God. If there is evil, it will some day be driven out. God's great evolutionary plan of things makes sure of that. But the time when depends upon you and me. Evil is conquered only by good, good wrought out by the hearts and brains and hands of living men and women. If we fail, the consummation waits.

Every year it becomes a greater shame for any human being to have deaf ears to humanity's cry for help. Evolution's ever clearer and clearer sounding message to all good men and women is, Join hands with God, to help him lift his world a little nearer heaven.

CHAPTER V

IMMORTALITY IN THE LIGHT OF EVOLUTION

Most of us are familiar with that fine passage in Shakespeare's Tempest:

"The cloud-capped towers, the gorgeous palaces, The solemn temples, the great globe itself, Yea, all which it inherit, shall dissolve, And, like this insubstantial pageant faded, Leave not a rack behind. We are such stuff As dreams are made on; and our little life Is rounded with a sleep."

This is one view of the world, and of human life.

Place beside it another. It shall be from Paul's second Epistle to the Corinthians: "We look not at the things which are seen, but at the things which are not seen; for the things which are seen are temporal, but the things which are not seen are eternal. For we know that if our earthly house of this tabernacle were dissolved, we have a building of God, a house not made with hands, eternal in the heavens."

Which of these two views of the world and of life is the true one? What are these

human lives of ours? Are they things of a day only? Or do they take hold on eternity? When the funeral bell tolls for our friends (as it will soon toll for us), and we gather around their motionless forms to bid them farewell, will it be forever? Or will there be a glad meeting awaiting us on some fairer shore?

These are questions that none of us can avoid asking. We should be less than human if we did not ask them. One difference between us and the brute animals below us is that we can ask them, and search for an answer.

Can Evolution give an answer? Can it help us in the direction of an answer?

Before making an inquiry concerning the evidences of immortality, it will be of service to do a little preliminary thinking on the general subject of evidence. There is confusion in many minds as to this whole matter of proof bearing on such subjects as that of life beyond this world. Many men say thoughtlessly, "Give us demonstration; give us demonstration; then we will believe; not otherwise." Do they know what they are saying? What do they mean by demonstration? Mathematical demonstration? Is this subject of a future life one of mathematics?

Then how are you going to apply mathematical demonstration to it, one way or the other to prove or to disprove? Is it a subject of logic? Then how are you going to apply logical demonstration to it, one way or the other?

The truth is, very few things in this world can we demonstrate, even of those that we most firmly believe, and concerning which we have the best grounds for confidence. We the source cannot demonstrate that the sun will rise tomorrow. We can establish a very strong probability that it will, but that is all. Yet that is enough. No reasonable man asks for more. On the strength of that probability we make all our plans for to-morrow, and go forward to meet the day with perfect confidence.

So with regard to nearly everything in life. our ground for belief is reasonable probability. All business is conducted on grounds of simply reasonable probability. No railroad company knows at the beginning of any day that it will have a single passenger that day. It makes all its preparations for the day's traffic on the grounds of probability. No merchant when he opens his store in the morning knows that he will have a customer. Nobody knows that there will be a student in any school of this

city next year or to-morrow. And yet reasonable probability is so safe a ground for trust and belief in all these matters that nobody thinks of asking for any other.

Here is a lesson for us in regard to grounds of belief in immortality. Why are we not content with the same kind of evidence here that we have in other things? We call a man a fool if he will not trust reasonable probability, and trust it with perfect confidence, in business, and in nearly everything pertaining to life. We call him a fool if he insists on demonstration. Then why should we insist on demonstration as soon as we begin to talk about things of another life? Why are we not satisfied there also with reasonable probability? And on the basis of such reasonable probability, if indeed we are able to find it, why do we not rest with assurance and peace? I bring up this point at the beginning, so that none of us may misunderstand regarding the evidence required to give us ground for belief in immortality; and so that all may avoid the folly of demanding demonstration in a realm where demonstration is neither possible nor needed.

Very well, then, in the light of Evolution do there seem to be valid reasons for believing in a future life? And, if so, what are they? These questions can be best answered by considering, first, some *objections*.

1. Perhaps the objection that is oftenest made to the doctrine of immortality is that of its impossibility, on the ground that mind cannot exist without organism. In this world man lives and thinks; but it is because he has a brain. The brain is the organ of thought. There can be no thought without brain. When a man dies and his brain perishes, there is an end to the man; therefore, immortality is simply impossible.

What are we to say to this? It requires only a little reflection to discover an answer.

In the first place, it seems to be a pure assumption that mind can exist only in connection with an organism. That the human mind is associated with a physical organism in the present life does not prove that no other plan of things is possible. For aught we know there may be such a thing as free spirit—spirit existing untrammelled by any organism of a physical kind—spirit as free as our thoughts are, and as superior to all brain limitations, matter limitations, space limitations—like our thoughts now here, now at the other side of the earth, now in the distant stars. Why may not spirit exist as free as that? We certainly see evidences of mind in

nature everywhere, in the rose, in the galaxies, in the sweep of law, in all the order of the universe. Has this mind a brain? Is it associated with organisms, or dependent on organism? Who dare say that? Then we had better be careful how we assert that there can be no mind without organism; and certainly we had better consider before we declare that there can be no mind without brain.

Even if we grant that mind does require an organism, what kind? Is no kind possible for something so fine as spirit, except such coarse brains as ours? Grant that in such a physical world as this - a world of earth, and rock. and air, and water, a world seen by the eye, and heard by the ear, and come into contact with by physical touch — such brains as ours may be necessary; but how about those finer, those subtler, those more wonderful worlds which science is revealing to us in so many ways?-worlds which are all about us, which transcend and penetrate this gross world of sense - worlds which stretch away into infinity, an "Unseen Universe," and yet, though unseen, if possible more real, and infinitely more resourceful and more marvellous than the universe which our eyes behold! Into such a universe, limitless in possibilities, whether considered extensively or intensively, the spectroscope and our theories of light-waves and of a universal ether give us a glimpse; into it electricity sets a door ajar; into it the Roentgen rays open a little window; into it the microscope with its marvels carries us a little way—an inch or two; of its wonders Professor Crooke's "radiant energy" gives a hint. Are we to suppose that in such a universe of infinite subtlety, and yet of solidest reality and inconceivable potentialities, mind must require an organism of the coarse kind which we see in our present brains and nervous systems?

Even if minds—at least finite minds like ours—do require an organism, is it not easy to conceive of an organism framed of the subtler material of the Unseen Universe—such material as radiant energy and the universal ether and electricity and the X-rays give us intimation of? Some of our greatest physicists are telling us that there is "no fact in physics, chemistry, or mechanics that contravenes the theory of an electro-luminous organism for man," such as may exist already unseen and unrecognized within his physical body, and wholly incapable of being affected by any such change as that of the dissolution of his body.

Something like this seems to have been Saint

Paul's thought, nineteen hundred years ago, when he said "there is a natural body and a spiritual body"—a body of flesh and blood, which is corruptible and perishes at death, and another of a nature finer and higher, which is incorruptible, and cannot be affected by death. The widely accepted, and I believe the fast-growing belief to-day among thoughtful men is virtually this. Toward essentially such a view I believe all our best science is tending.

2. One profoundly significant fact we are very likely to overlook in all our discussions of the possibility of man's living again after death; it is the fact that every man who is living at all is already living after death—and not only after one death, but after several.

What do I mean? I mean that life and death are both at work all the while in our bodies. Without death there is no life. By the process which is known in physiological science as anabolism and katabolism our bodies are all the while dying and being built up again with new tissue. In some of the organs of the body the breaking down of the old tissue and the replacing of that which has done its work with new is rapid; in other organs it is comparatively slow. There seems to

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be no general consensus of opinion among scientists as to just how long a time it takes for the dving process to involve all the organic matter of the body. It has sometimes been said that we get a wholly new physical organism once in seven years. This is a dogmatic statement which probably science does not justify. The time may be too short or it may be too long. But nothing is more certain than that the process of destruction and rebuilding is constantly going on, more or less rapidly, in every part of the body; and hence that, within a period longer or shorter, every particle of living matter in any given human organism at any particular time will have died, and most of it will have passed away from the organism, and its place will have been taken by other matter. This is only another way of saying that we are all constantly losing our bodies by death and getting new ones. In a few years - possibly three or four, possibly seven, possibly ten - all the living material in the bodies which we now have will be dead, and we, if we remain in the flesh at all, will be "clothed upon" with what in strictest scientific truth may be called new bodies. Thus I trust my meaning is clear when I say that we are all living after death. and most of us after many deaths. Our bodies

died, we did not. Right through all these deaths each one of us (his soul, his consciousness, his ego, his real self, that thinks and wills and loves) has persisted, has lived right on.

Does all this have no significance as bearing upon the subject of immortality? Men say, our souls cannot survive the death of our bodies. I reply: How do you know? What ground have you for such an inference? If we have already survived the death of our bodies many times, or even once, how dares any one deny that we may be able to do it again? Even if the next death comes in a somewhat different way from those of the past, it will be no more certainly death.

3. Another objection to the doctrine of immortality, which is often made, is the claim that no line can be drawn between man and the animals below him, so that if man is immortal they also must be. They and he came into being by the same path of Evolution—many of them have bodies close akin to his; many give evidence of intelligence, reason, and other mental attributes similar to his; some even show moral qualities, as fidelity, a sense of duty, an ability to distinguish between right and wrong. Must we not believe, therefore, that they and he will have the same fate? If

he lives again, will not they? If they perish, must not he?

In reply, the first thought that suggests itself is the inquiry: Why may it not be possible that at least all the nobler and more intelligent of the lower animals may live again? Some, by reason of their better qualities and their higher intelligence, would seem to be fitter to survive than others. Perhaps that is the ultimate outcome of the great law of the survival of the fittest, that some of the animals below man may be permitted to cross into another world and be man's companions there as they have been here. It would seem easier to believe this than to believe that man is to perish.

However, I cannot think the claim is sound that man and the brute animals are to be classed together. We do not class them together in other respects; why should we in this? There seem to be certain very radical distinctions between them. What are they? As pointed out in a previous chapter, the most important appears to be self-consciousness. When in the upward progress of animal life in this world a being arrived who was not only conscious, but was conscious that he was conscious; who not only knew, but knew that he knew; who was a self-centred ego, able to

think before and after, and to relate himself not only to his physical environment, but to truth and right and duty and the powers that placed him here, and to reach up after ideals of life higher than he had yet attained, then man was born. Then a creature had made his appearance on the earth not simply superior in degree to the horse and the dog and the ape, but different in kind. At last the century plant of the world's life had blossomed, and the blossom was something more beautiful and precious than had ever before been seen beneath earthly skies.

Suppose we grant that the dog has something which we may call a sort of rudimentary, partially formed mind; is there anything strange if nature permits a thing so imperfect to pass out of existence at the death of the body which it has served? It is everywhere nature's plan, to let the imperfect, the only partially formed, drop out, and preserve permanently only the best, the most perfect.

This also is man's plan. Go with me into a great foundry where castings are being made. I see a hundred moulds filled with the shining metal. Wait until the moulds are opened. Ninety of the castings are perfect, ten are imperfect. What is done with the imperfect? They are broken, and melted over again. Is

there anything unreasonable in that? Dogs, horses, apes, the animals below man, are the imperfect castings of the world of mind. Why should they be permanently kept? Man is the most perfect mind-product of the world. Is that not reason why he may be preserved, even when they are suffered to perish?

Nature is full of illustrations of that which, falling below a certain mark, fails, while that which rises above persists. Thus a seed, if it has within it a certain amount of vitality, lives, germinates, and produces after its kind, while if it lacks, no matter how little, of the requisite amount, it dies.

Says John Fiske:

"I can see no insuperable difficulty in the notion that, at some period of the evolution of humanity, this the divine spark may have acquired sufficient concentration and steadiness to survive the wreck of material forms and endure forever."

For one I cannot see why this view is not in the highest degree reasonable.

4. One other objection to the doctrine of immortality I must mention in a word. It is the claim that in Evolution it is the *race* that is cared for, not the individual; so that if immortality of any kind awaits man we must believe it is immortality of the race in this world,

and not immortality of individual persons beyond this world.

But how can nature care for the race without caring for individuals? Can the race be separated from the individuals who compose it? As for immortality of the race in this world, we know that cannot be; for it is only a question of time when the earth itself shall reach the end of its career, and when its shallowing seas, its frozen continents, and thin air will no longer sustain the life of man.

But it is not true that nature does not care for individuals. Individuals are exactly what she does care for. Her whole effort is to produce individuals that shall be finer and finer. more and more perfect. It is by improving her individuals that she makes all her advances in species, genera, families, races. With such jealous and unfailing care for individuals, and such constant effort to produce the best, is it any wonder if the individuals of that part of creation which represent her best should be perpetuated, and not allowed to perish? Shall nature not care enough for her chef-d'oeuvre to save it from ruin? If there is to be any immortality at all, it must be of the individual, and in a sphere beyond the transitoriness of earthly conditions; it cannot be of the race here. Either there is immortality for individual man, or else there is utter and irremediable destruction for man, race, everything that this world has achieved or meant.

Such, then, are the most serious objections, so far as I know, to the doctrine of man's immortality considered in the light of Evolution. Looked at fairly do they not fade away? I believe the considerations presented show that they do, and that immortality, instead of being impossible, is possible, and has much probability in its favor.

But we are not yet through. Other and even stronger arguments for immortality still remain.

1. First of all, it seems to be a well-nigh universal *belief* of men—a belief so deep as to be a very part of their nature — that death does not end all, but that there is another existence beyond the present scene. It is doubtful if a single people in the world can be pointed to, savage or civilized, that does not cherish this belief in some form. Even the Buddhists are no exception, as might easily be shown.

Now what does this mean? This belief has not been wrought into the nations and races of mankind by chance. The universe has planted this faith in man's soul. May we, then, believe it a lie? Is there no reality corresponding to it?

Why has the universe wrought for man eyes? Because there was something to see. Why ears? Because there was something to hear. Why reason? Because he was in a universe that was rational. Why a sense of beauty? Because there was beauty all around him waiting to be recognized. Why love? Because there were beings to be loved, and to love him in return. Why his belief in right and justice? Because there are right and justice in the world. Is man's belief in immortality an exception? While all else in his being is grounded in reality, is this ineradicable faith of his, that he was not born to die, only a delusion?

Do you say it is simply a superstition, like witchcraft, or faith in signs? Then why does it not show some *marks* of superstition? Why is it not confined to dark ages and uncivilized peoples? Why does it not tend to pass away with enlightenment? Instead of that, it is found nowhere in such strength as in enlightened ages, and among enlightened peoples. Nor is it the worst, but the best persons, that hold it most firmly. The greatest believers in immortality, as a rule, are the greatest and noblest souls of every age.

I think all this means that the belief is rational, and rooted in great realities which men may trust. I think man's instinct that he is greater than the brute beasts, greater than a clod, greater than death, is a voice of the universe—and this means a voice of God—speaking in his soul.

- 2. Somewhat similar to this, yet different, is another argument, which I think ought to be regarded as having weight. It is the argument of justice, based on the fact that man everywhere wants immortality, longs for it as for nothing else. There are here and there exceptions-men who say one life is enough. But they are so rare as to be scarcely visible amid the multitudes of those who long and pray for a life that has no death. Now what has put this desire into men's hearts? Did they create it for themselves? It came to them from the Creator of their being. Did he give it to them in mockery? Can he of right withhold immortality from men into whose hearts he has himself put such desire for it?
- 3. Have we not a right to base a faith in immortality on the greatness of man's nature? Think of minds that can work out the intricacies of mathematics in all its endless forms; that can create sciences; that can write lit-

eratures; that can bridge the ocean with swift steamships, and speak from shore to shore beneath its waters; and harness the lightnings, and measure and weigh the worlds of space; and rob surgery of pain, and say to pestilence, Stay thy hand of death; and transform deserts into paradises, and build great cities, and rule vast empires, and connect all sections together by trade, and link every city and town of every civilized land with every other by mail routes; and lift the world up century by century to higher and higher civilization! Can minds that accomplish all this be snuffed out as a candle at the end of a brief threescore years and ten?

Is man built on a pattern suited only for a day? Look at these powers of his that are unearthing, restoring, reconstructing the past—actually creating the world's past over again! We are digging up Rome, and opening its buried centuries and its forgotten histories to the light of day. We are excavating at many places in Greece and Crete and Asia Minor, and finding cities hidden beneath cities, and learning more about their history, their art, their civilization, and their life, than even Plato or Aristotle knew. The same with Egypt! A little while ago the great Egypt of the past was lost to the world. Men looked

on her wonderful monuments with blind eyes that could not see. Not a word of the inscriptions that covered her temples and tombs could they read. The history and civilization of her almost numberless centuries were as if they had not been. The same was true of Babylonia and Assyria. But within our century man has unlocked the mysteries of these lands and is bringing them all to light. So too he is creating anew the mound-builders and their lives, and the cave-dwellers and theirs. and is finding out the secrets of the ages before man existed, when only brute beasts inhabited the earth, and of ages yet more remote when there was no life of any kind. Indeed it seems as if there is no secret of the past that he will not discover. Is such a being only a creature of a day?

4. Are there not *prophecies* wrapped up in in man which declare that he was not born to die?

Man's nature seems to be full of prophecies of something greater than he has yet attained, or can attain in this world. Such a prophecy is seen in his capacity of growth and progress. The brute animals may advance a little way. Then the end of their tether is reached, they can go no farther.

But man's capacities for development are

practically infinite. None may lay down a line beyond which he may not go. None can draw a circle bounding his knowledge or his thought. Only the universe is large enough for his home; only eternity long enough for the realization of the possibilities that sleep in his great nature.

I know not how anything can be more clear than that human life as we see it in this world is a thing unfinished, incomplete. Does this incompleteness mean nothing? Everywhere we see "great powers and small performances; vast schemes and petty results, 'thoughts that wander through eternity,' and a life that

'Can but little more supply
Than just to look about us and to die.'

"Who has ever lived to accomplish his utmost aim? What career is so complete as to comprehend all that is wanted of this world? We all retire with imperfect victory from the battle of life. The campaign is not finished when we strike tents. . . . The scholar has still unsolved problems at which he is laboring. The philosopher is summoned in the midst of experiments he cannot stay to complete. The philanthropist is overtaken in projects of reform that are to add new value to human life."

Martineau, at eighty, though his life had been marvellously full of attainment, exclaimed, "How small a part of my plans have I been able to carry out! Nothing is so plain as that life at its fullest on earth is a fragment."

Sir Isaac Newton, at the end of a life that achieved more for science than almost any other of modern times, compared himself to a child who had merely gathered a few pebbles on the beach, while the vast ocean lay beyond unexplored.

Victor Hugo, in his old age, declared: "For half a century I have been writing my thoughts in prose and verse: history, philosophy, drama, romance, tradition, satire, ode, and song. I have tried all. But I feel I have not said a thousandth part of what is in me."

Now what is the explanation of this strange, dark riddle of the incompleteness of human life—the fragmentariness of even the fullest earthly career? If man is at the beginning of his existence, all is plain. If he is at the end, all is midnight darkness. I know of no philosophy that gives us a ray of light except that of Hugo, who completed the passage from which I have quoted by adding: "When I go down to the grave I can say, like so many others, 'I have finished my day's work,' but I cannot say, 'I have finished my life.' I shall

begin again next morning. The tomb is not a blind alley; it is a thoroughfare. I close on the twilight to open with the dawn."

With this philosophy of life, all is luminous. Fragments that are parts of larger wholes, we can understand. Beginnings that are meant to go on until some worthy end is reached, we can understand. We can understand incompleteness that is on its way to completeness. But fragments that have no meaning, incompleteness that ends with itself, beginnings that were never intended to be anything else but beginnings, throw us into utter intellectual confusion. We are dazed and dumb. We have the sense that all intelligence has gone out of the universe, and that the rational foundation of things has given way.

5. This leads to a final reason which compels me to believe in immortality for man. It is that I may keep my faith in the *rationality* of nature, or, to express it better, in the *reasonableness of God's work*.

Wherever I look in the heavens or in the earth, there are signs of a divine wisdom. Indeed with such wisdom the whole universe is ablaze, from mightiest sun down to tiniest molecule. Order is everywhere; adaptation is everywhere; harmony is everywhere; law is everywhere. All this means that reason is at the heart of things.

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But if this be so, then must man be immortal. For it is impossible to believe that rationality holds everywhere else and breaks down when it comes to man. Everything below man has its raison d'être; does man have none? Everything else has its clear aim and purpose: was man, the highest of all, made only to be destroyed as soon as completed? Everywhere below man there is progress. The inorganic prepares the way for the organic. The organic rises to the psychic. The psychic culminates in man, a being who can reason, and thus put himself into relations with the Infinite Reason; who can "think God's thoughts after him": who can know, and admire, and consciously put himself into harmony with God's laws: who can understand justice, righteousness, and truth; who can aspire and worship, and meet God's love with an answering love, as a child responds to the affection of a parent. Can we believe that God, having through an evolutionary process of millions of years, and at an expense so vast that we can only call it infinite, brought into existence a being so high, so near in nature to himself, has nothing for that being but death and extinction as soon as made? Then the rationality of the universe breaks down. God is less intelligent than even a man; for no man would do anything so utterly without reason as that.

If a man should plant fruit trees and cut them down as soon as they began to bear fruit, or paint pictures and destroy them as soon as finished, or build ships never intending to send them to sea, we should say he had lost his reason, and call him a fool and not a man. But even such folly would seem to be as nothing compared with that which could bring man into existence as the crown and culmination of nature's infinitely vast and infinitely expensive evolutionary process, only to blot him out as soon as made.

No, I am compelled to believe that man will not be destroyed—that God has made him to partake of his own divine nature and be as immortal as himself, because I believe in the reasonableness of God's work. Faith in God seems necessarily to carry with it

"faith

That, some far day, will be found Ripeness in things now rathe, Wrong righted, each chain unbound, Renewal born out of scathe.

"I have faith such end shall be.
From the first Power was—I knew;
Life has made clear to me
That, strive but for closer view,
Love were as plain to see.

"When see? When there dawns a day,
If not on the homely earth,
Then yonder, worlds away,
Where the strange and new have birth
And Power comes full in play."

It is said that God suffers other things to perish—then why not man? The reply is, What does he permit to perish whose cost bears any comparison with that of man?—or whose intrinsic greatness is to be even mentioned beside man's?

In a world where Evolution is the law, it seems inevitable that man's body must die. But what need for his soul to die? The destruction of his body is a slight matter. But the death of his soul would be an infinite loss—not only involving the destruction of man, but seeming to take all meaning out of the evolutionary process, and thus virtually to destroy God—for what God have we left if we can see no meaning in his universe?

For one, I cannot believe the universe idiotic. That God's evolutionary process by which he has created both the world and man means something great and worthy, I do not even know how to question. Much more easily could I question my own sanity. But if it does mean something great and worthy, then man is safe, and safe forever.

CHAPTER VI

THE BIBLE, JESUS, AND CHRIS-TIANITY IN THE LIGHT OF EVOLUTION

In the light of Evolution, how are we to look upon the Bible?

I answer: The most obvious fact to be noted is that the Bible is one of the world's great sacred books.

Sacred books are not peculiar to Christianity and Judaism. The Hindus have theirs; the Buddhists have theirs; the Chinese have theirs; the Mohammedans have theirs. Most Christian scholars rank ours as higher in moral and spiritual value than any of the others. I have given some study to all, and it seems to me that ours is justly to be placed first. But whether this be true or not, it is plain that all belong to one class; all are members of one family.

Sacred books mark a stage in the religious progress of mankind. They are at once results of that progress, and factors in it.

Some sacred books spring from a man, a great prophet or religious teacher. They are the record of his teachings and his life. Thus

the Koran of the Mohammedans is the record of the life and teachings of Mahomet. The Tripataka (or Three Baskets) of the Buddhists, gives us the teachings of Buddha. Our Gospels give us the life and teachings of Jesus.

Other sacred books spring from the people, rather than from any single person; they are the product of the people's religious life for a considerable period of time. Such are the Vedas of India. These Vedas are composed of hymns and prayers and religious liturgies, and were hundreds of years in coming into existence. Such, too, is our Old Testament, which was also hundreds of years in coming into being. Our Bible as a whole, including the Old Testament and the New, spans more than a thousand years of time, between the origin of its earliest book and the origin of its latest.

We call the Bible a book; it is much more accurate to think of it as a literature — the literature of the Hebrew people for a period essentially as long as from King Alfred the Great to the present day.

This literature is wholly natural — as natural as a literature could possibly be. It sprang out of all that was real and earnest in the history and experience of the people — their public life, their private life, their secular

life, their religious life; peace, war; prosperity, adversity; birth, marriage, death; joy, sorrow; youth, age; the home, the synagogue, the temple; the life of the shepherd, caring for his sheep almost as if they were children. leading them by the side of still waters and in green pastures, and protecting them from the foes that waited to attack and devour; the life of the agriculturist, sowing and reaping his grain, or caring for his vineyard; the life of the city, with its buying and selling; the life of the king, with its public duties and cares, and with its outward splendors. Prose, poetry, history, biography; elaborate ecclesiastical regulations, law codes, genealogies; legends, myths, tales of sweet peace, tales of horrible blood and battle and barbarity: thrilling phophecies of hope, pessimistic wails of despair; earnest prayers, tender hymns of devotion, solemn hymns of contrition, soulstirring hymns of joy and praise; wise proverbs, beautiful parables, crude superstitions of an unscientific age; idyls of love, romances, odes, elegies, epistles, wild apocalyptic dreams. mighty moral appeals, tremendous denunciations of wrong—almost all forms of utterance by which life can be portrayed or the human soul can give expression to its hopes and fears. its fruitions and disappointments, its contritions, aspirations, and highest worships, its struggles, its defeats, and its victories — all these, slowly, and by wholly natural causes, gathered together into a single volume, contribute to make up this marvellous, this many-sided, this in many ways imperfect, yet this great and incomparably precious book which we call our Bible.¹

But when I say that no book ever came into existence more naturally, that does not mean that God was not in it. It means that God was in it: for the natural is God's way of doing things—that is what makes it natural. No book was ever more deeply or truly a human book. But because it was a human book. therefore it was a divine book. For where is God's fullest revelation of himself except in the human? God speaks through the stars of the night, the flowers of the field, and all the marvellous on-goings of physical nature. But his clearest speech is ever in man's soul. Because the Bible is rich with deep revelations of the human, it is rich with deep revelations of God; for ever through that which is deepest and truest in human souls—

¹ See the author's book, "The Origin and Character of the Bible," chapters i., ii., iv., xv., xvi, xxiii. The Beacon Press, Inc.

our own or other men's—we approach nearest to God.

In the history of the human race, different nations and peoples have different parts to perform. The genius of Greece was intellectual and æsthetic. The genius of Rome was legal, organizing, practical. The genius of Palestine was ethical and spiritual. Greece, through her art and poetry and philosophy, had a work to do, not only for herself, but for all peoples. Rome, through her law, had a work to do, not only for herself, but for mankind. Palestine, through her religion, had a still more important work to do for the world. We speak of the Jews as a chosen people. And truly they were. But what people that is true to itself, true to its own genius and mission. is not a chosen people? What people does not have a place to fill in the progress of the race. even if its place be not so important as that of the Greeks or the Jews? Thus we see how large are God's ways; and by how many agencies he carries on the divine education of humanity.

It is important for us to understand, not only that the Bible grew, grew as naturally as any other literature—part by part, this book or fragment of a book in this age, and that in the next, and so on, as long as the Jewish

people continued to live in Palestine—but it is also important for us to understand that this literary growth was accompanied by, and registers, a distinct moral growth, a distinct religious advance of the people from first to last.

The religion of Israel was not equally perfect in its earlier and later periods. It did not start as high as it ended. On the contrary it started very low, and only rose to its later elevation very slowly, and through varied experiences and long struggles. When the children of Israel first came into Palestine from Egypt, under the leadership of Moses. they were newly liberated slaves. Their civilization was very crude, their moral development was rudimentary, their conceptions of religion and of God were very imperfect. They had been idolaters, and were only just beginning to lay the idolatry aside; and for hundreds of years they kept lapsing back into idolatry, again and again, whenever they could find any pretext. Their ideas of the divine character were hardly above those held by the heathen peoples around about them. thought of Jehovah as getting angry, as jealous, as repenting, as deceiving, as sanctioning fraud, as commanding shocking cruelties, such as the slaughter of thousands of men, women, and innocent children, as manifesting every passion and imperfection of man. Not only were there vast numbers of bloody animal sacrifices offered to him, but even human sacrifices, as in the cases of Jephtha's daughter, and Abraham's offering of Isaac, commanded, but at the last moment averted; and Samuel hewing King Agag in pieces "before the Lord."

And the morals of the people were not higher than their ideas of God. Read such books as Joshua and Judges, and see the lawlessness and cruelty that abound; assassinations like those committed by Ehud and Jael; brutalities like those practiced upon Adonibezek and the seventy kings; debaucheries like those of Samson; Samuel's words to Saul, "Smite Amalek; destroy all; slay man and woman, infant and suckling."

I say, such was the low condition of civilization, morals, and religion among the Israelites, when, soon after emerging from the bondage of Egypt, they began their national career in Palestine. It was from this that they rose to what they afterward became. This was the starting-point of that remarkable evolution, which as the centuries went on, lifted them to such a height, and gave them the psalms, the prophets, and finally Jesus and Paul, and the lofty teachings of the New Testament.

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What is the Bible? It is the record of this long Evolution. It is the literature growing out of this Evolution—all stages of the Evolution. Some of these books spring from its earliest and crudest stage: some from a stage a step higher; and others from the various stages, on to the last. Do you wonder, therefore, that not all parts of the Bible teach the same religion or the same morality? There is hardly a thoughtful, candid person to be found who has not read things in the Old Testament that have shocked him. He has said to himself. Can it be possible that a divine and infallible book can contain such teachings, as the word of God? Many a man, finding these things in the Bible—for they cannot be hidden from sight—has turned away in disgust and said. I will have nothing more to do with such a book, or the religion that it enjoins. It was these things that gave such power to Mr. Ingersoll's arraignments of the Bible. See, he said, these things are your Bible. These things are the teachings of your infallible book. These things are your divine religion. What answer could be made? None, by men who held to the common doctrines of Bible infallibility; who held that all parts of the Bible are of equal inspiration and equal authority. The only answer that could be made, or that can

be made, is that which intelligent and candid Bible scholarship offers, which shows us that the Bible is not all one book; its parts are not all of equal inspiration or value; it is an evolution; it represents all stages of the moral and religious progress of the Hebrew people, from polytheism to Christianity; from God, a God of vengeance and cruelty and blood, to God, a being of justice and love, a Father in Heaven; from the ethics which says, Hate and kill your enemies, to the ethics which says, Love your enemies; from Samson and his ideals of lust, cunning, and physical strength, to Jesus with his ideals of purity, pity, and brotherhood.

As soon as we fully grasp this idea of growth, progress, evolution in the religion of the Bible, we are no longer troubled by the low views of God and morality which we find in certain Scriptural books. They are what we expect. We see that they are the natural and necessary products of their time. They show us the early stage of the evolutionary process; they show us what later the Jewish people themselves outgrew and passed by.

Nobody has made this clearer than Jesus. Jesus says: "Ye have heard that it hath been said (by men in the earlier time), 'Thou shalt love thy neighbor and hate thine enemy.' But I say unto you, Love your enemies, bless them

that curse you, and do good to them that hate you." "Ye have heard that it hath been said, 'An eve for an eve, and a tooth for a tooth': but the time for that has passed by. I say unto you. Resist not evil." Now which of these teachings are we to follow, the earlier and lower, found in Exodus and Deuteronomy? or the later and higher, found in the Sermon on the Mount? We cannot follow both. No. the only thing which can save us from utter confusion in interpreting the Bible, is a recognition of the fact that it is an evolution. It is not all of equal value. It is not all of equal authority. Some parts are outgrown, as Jesus said. Some parts represent the child-stage of religion and ethics; other parts represent that which is somewhat more mature and complete. on to that which is highest and best in the great prophets and in Jesus. Here, where the evolution reaches its summit, we have teachings which can never be outgrown. Here we have truth which will be food for the moral and spiritual life of man forever.1

And now we see where Jesus stands in this evolution. He is its consummation and crown.

It is important to notice how all intellectual and moral progress in the world is promoted.

¹ See "The Origin and Character of the Bible," chapters xix., xx., xxi., xxii.

It is always promoted by means of men superior to their fellows. Men of larger knowledge or deeper insight into truth rise up and become leaders of their time. They are lights which others follow.

In the history of Israel, the prophets were the men who led the advance. Nearly every generation had its prophet souls, men of preeminent moral earnestness, men of faith, men of conscience, men of religious zeal and fervor, men of clearer vision of God and eternal things than their fellows.

These prophets differed greatly in intellectual ability, in moral attainments, and in spiritual insight. But they were all religiously in advance of the people, and so they were able to lead the nation on. In the prophets the religious genius of Israel rose to its highest. Some of these prophets were lofty souls, the purity and nobleness of whose character and the moral splendor of whose teachings have shed undying lustre upon Palestine, and conferred inestimable benefit upon the race. Among the greatest we may name Hosea, Micah, Jeremiah, the first and the second Isaiah. and Paul. But the greatest of all was Jesus. In him the matchless plant of Hebrew prophecv reached its tallest and finest blossom.

When the Greek race, whose genius for art,

for poetry, and for phlosophy was the highest in the ancient world, produced its best, is it any wonder that it gave to mankind a Phidias, a Sophocles, and a Plato? So when the Hebrew race, whose genius for religion was the highest in the ancient world, produced its best, is it any wonder that it gave to mankind an Isaiah, a Paul, and a Jesus? Thus we see what is the place that Evolution assigns to Jesus. It lifts him up to the position of the greatest of the Hebrew prophets, and that means to the place of the greatest of the religious teachers of the ancient world. Was there ever conferred upon man a more exalted honor than this?

And now what are we to say concerning the religion of Jesus? Does Evolution disturb that?

Of course in order to answer this question we must inquire, What was the religion of Jesus?

We have found our past studies of Evolution pushing everything pertaining to any supposed fall of the race in Adam quite back into the realm of legend and myth. The race did not have its origin six thousand years ago, but many times six thousand. Man was not created in an exalted and perfect condition, from which he has fallen. He was created in

a low and imperfect condition, from which he has risen.

Where shall we go to find the religion of Jesus? Some tell us to the creeds. But why to the creeds? Did he write them? Most of the creeds were written quite in modern times. The oldest creeds we have are the Athanasian Creed, the Nicene Creed, and the so-called Apostles' Creed. When were they written? All of them in dark ages, when Christianity had wandered far away from the teachings of Christ: not one of them within three hundred years of the Master's time. It is the impression of many that at least the so-called Apostles' Creed goes back to the time of the apostles. But this is a mistake. Dean Stanley says that about all we know concerning its origin is that the apostles had nothing whatever to do with it. We do, however, know something more than this. We know that it came into existence centuries this side of the apostolic age.

Where, then, shall we go to find out what was the religion of Jesus? Plainly, we must go to the New Testament. But to what part of the New Testament? Some parts were written earlier than others. Some parts tell us directly about Jesus; some do not. It is clear that to get closest to Jesus, we must go to the

Gospels. But here again there is a difference. Probably the earliest of the Gospels is Mark. Next in time to Mark come Matthew and Luke. John is very late. So, then, we must go to Mark, Matthew, and Luke.

What, then, does the Sermon on the Mount contain—this completest setting forth of his religious doctrine that Jesus makes anywhere?

Its great central thought is the Fatherhood of God and the Brotherhood of Man. God is our Father. We are all brothers. Therefore we must live like brothers, and love like brothers, and be kind and forgiving and helpful to one another like brothers. We must be pure in heart, we must be peaceable, we must be merciful, we must love even our enemies, we must be sincere, we must do nothing to be seen of men, we must offer to God deeds not words. lives not professions. This is the religion of Jesus, as found in the fullest description that he anywhere gives of it. Could a religion be simpler? Could any be more profound? Could any be more beautiful? Could any be nobler? Could any be more uplifting to humanity? Could any be farther removed from the creeds and theologies taught in his name?

Turn from the Sermon on the Mount to other parts of the Gospels, and what do we find? In one place Jesus gives an epitome of his religion — a statement in three sentences of what is the sum and substance of it all. What is it? Love. Love to God and to one's neighbor. That is the whole. That is religion! How it compasses within its wide arms all heaven and all earth. Yes, and every possible hell! How it transforms earth into heaven! and insures that no hell shall fail to be transformed into heaven at last!

From the very beginning of his ministry, and all through, Jesus declares that his work is to establish the kingdom of heaven on earth. What is the kingdom of heaven? It is purity and love and righteousness. It is the reign of God in the soul of man. His disciples asked him who was the greatest. He answered, He that serves. He took a child and set it in their midst and said, "Of such is the kingdom of heaven." He taught that true worship is worship of the Father in spirit and in truth.

Much of his teaching was in parables. What do these parables teach? The scheme of theology found to-day in the leading creeds of Christendom? Nothing of the kind. They teach a practical religion of love and mercy and good deeds. The greatest of the parables are those of the Good Samaritan and the Prodigal Son. The lesson of the Parable of the Good Samaritan is, that we make a mis-

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take if we think that the best religion in this world is confined to those who bear the religious names and occupy the prominent places in religious circles. The priest who was an accepted religious teacher, and the Levite who belonged to the religious set, had less real religion than the poor despised Samaritan; for they both passed by the poor robbed and wounded man with only looks of pity, but the Samaritan ministered to him with deeds of pity and service.

What is the religion of the Parable of the Prodigal Son? It, too, is very far from the religion of the generally accepted creeds and theologies. A boy goes away from home, and falls into wild and evil ways. At last he reaps what he sows, as all men must sooner or later. and he falls into misery and want. Those who have been his companions in his sin desert him when misfortune comes. He has no money, no friends; his distress is great. Now he sees the evil of his ways. Bitterness and sorrow and contrition fill his soul. In his misery, he remembers his home and his father. Does his father still love him? Can his father forgive him? The best that is in him speaks and says, "I will arise and go to my father, and I will say, Father, I have sinned against heaven and before thee, and am no more

worthy to be called thy son; make me as one of thy hired servants." So he arose and went to his father. What did he find? Had the fountains of love gone dry in the father's heart? They know not a father's love who think that. The father, waiting, waiting for his return, "saw him while yet he was a great way off, ran, fell on his neck, and kissed him," exclaiming with a joy which words could but poorly express, "This, my son, was dead, and is alive; was lost, and is found." Such is the tender and beautiful story.

Such, then, is the religion of Jesus, as we find it in the Gospels which take us nearest to him. Such, according to the earliest and best witnesses, and according to the testimony of his own words, is Christianity as Christ preached it and lived it. It is no scheme. It depends for its truth upon no Adam. The religion of Jesus is spiritual, ethical, of the heart, of the conscience. It is love, it is worship, it is duty, it is service, it is the pure heart and the right life, and it is nothing else.

What attitude does Evolution take toward such a religion? Does it oppose it? Does it disturb it? On the contrary, such a religion is exactly in line with Evolution in its higher aspects. The world's evolution reaches its highest in man. Man's evolution reaches its

highest in the moral and spiritual. The moral and spiritual tends ever toward such a religion as that of Jesus as its highest possible expression and embodiment.

Jesus taught the universal religion, the eternal religion, because he taught the religion of the soul, the religion of love and life. Toward that religion Judaism had been tending for centuries. Much that he taught had been taught by others before him. Indeed much had been taught in other lands, outside of Palestine—by great spiritual seers and prophets in India and Greece and elsewhere. But he saw with a clearer vision than it had been given any other to see. So he was able to plant a banner higher up the hills of God than any other had done. He was able to inaugurate a religious movement more elevating, more quickening, more fruitful than any other in the history of the world.

It is instructive to notice that there has never been any conflict between science and the religion of Jesus. The battles which science has had to fight have been with the theologies which have arisen and attached themselves to the religion of Jesus, but were no part of it. The new astronomy taught by Copernicus and Galileo had a long battle to fight with theology. So had physics when it

came on the scene. So had geology. Evolution is fighting such a battle now. So is biblical scholarship. But none of these battles have ever disturbed the religion of Jesus. That religion was at home under the old; it is at home under the new. It sees in science and enlarged knowledge friends, not enemies. The more of light, the more of God.

Why has the Christian church wandered so far away from the religion of Jesus? Why is its teaching to-day so much below that of the Master?

The explanation is partly, at least, in the greatness of Jesus. He was so much ahead of his time.

The world to-day in art is not up to Michael Angelo. The world to-day in poetry is not up to Shakespeare. The reason is, these men were so great. They were so far in advance of nearly all the rest of mankind. But the fact that they lived and wrought has been a power ever since to move the world forward. Only, the world is so large—the mass to be moved is so great!

So with Jesus. Was it to be expected that the world could be brought up to him in a century, or in twenty centuries? Yet it is on the way. And his influence is perhaps the mightiest single force in helping on the advance.

We talk about Christianity having early conquered the Roman Empire; and later conquering the barbarian peoples of central and northern Europe. But as a fact these socalled conquests were generally compromises, and half-surrenders. Christianity "stooped to conquer." She gave to the "conquered" countries the Christian name, but she accepted much of their heathenism in return, and incorporated it into her own thought, institutions, forms of worship, and life. Perhaps under the circumstances this was inevitable. Possibly it was the only way in which the Christianizing process could begin at all the only way in which the first step could be taken toward the purer truth and higher life which the religion of Jesus meant. But for the time being it seriously corrupted Christianity. It left the world with a vast deal of religion calling itself by the Christian name which in reality was nearly as much heathen as Christian. It was inevitable that sooner or later Christianity should awake to consciousness of the fact that it was corrupted with this heathen element, and must purify itself. Its first great awakening in this direction was the Protestant Reformation. The work begun then did not stop, but has continued, and is going forward in our day on a vastly larger

scale, with more radical and thorough-going ends in view, and impelled by more numerous forces of enlightenment, than ever before. Now, for the first time since the age of the apostles, the world is getting a considerable body of churches planted distinctly upon the highest ethical and spiritual teaching of Jesus—that which he himself declared to be the centre and soul of his religion-namely, God's Fatherhood and Man's Brotherhood, or Love to God and Love to Man. These facts fill the future with hope. This work of purification and enlightenment will go on. Nothing can stop it. All the forces of progress are on its side. Sometime Christianity will be really Christian.

The cry is raised in many quarters in our day, Back to Jesus! At first thought this seems like a cry of retrogression. I think it is not. I think it is a summons to an advance. It is a summons back from smaller leaders to a greater; above all, it is a summons away from those theologies which have so obscured and weighted the religion of Jesus, back to that religion itself, as it shines in the teachings and life of the Master. Such a going back is a real going forward. It is a going back to get a clearer vision, a higher inspiration, a nobler banner, with which to press on.

No, the work of Jesus is not done. The influence of his religion is only in its morning. The lovers of Jesus need not fear. The world is moving on, and in a sense deeper than ever before Jesus is its leader.

The study of the evolution of religion has many lessons to teach.

One is a lesson of hope. All evolution is at once a history and a prophecy. The law which has been operative in the past we know will be operative in the future. The world cannot go permanently backward.

We are sometimes tempted to think there is no evolution in connection with things religious because the evolution does not proceed in straight lines, in all lands at once, and with steady, unbroken progress through the centuries. But no evolution proceeds in that way. All forms of evolution on the globe have been iregular - now fast, now slow, now pushing forward in one direction, now in another, and now seeming for a time to recede. Yet on the whole there has been advance. Evolution, religious and other, is like a great river. Here its path is straight, here it is tortuous; here its current is strong, here it is sluggish; here there is an eddy, with a backward flow. Yet the river makes progress; it grows deeper and wider as it advances; when it begins its career in the mountains, it is a rill; when it pours its waters into the sea, it is a great flood.

The fact that man's moral and spiritual development has been carried so far as we now see, is a pledge that it will be completed. The Eternal Wisdom will leave none of its great tasks half done; especially this, the highest, the crowning one of all. The evolution of religion means that man will at last be man. The inheritances from the brute that still cling to him will one day be subdued and put under the control of reason and conscience. Sometime he will learn to love God and his brother. Then earth will be heaven.

One important lesson which the study of religious evolution has to teach us all is, that real progress can never be made by ignoring the past. The true radical is the true conservative; the true conservative is the true radical. We cannot cut ourselves off from the past without death. "The past of religion, as of all other things, is the great mother breast which holds the nourishment of humanity, present and future." Those whom God has placed at the front of the religious progress of our time, need above all others to learn this lesson. If we would go forward safely, we must keep our communication open toward the past; not to retreat to positions

rightly left behind, but to draw needed supplies for our further advance.

Not, as some would have us believe, by lightly throwing away the Bible because it is not all good, but by using it wisely, passing by its dross and treasuring up its gold; not by turning away from Jesus because myths and legends have sprung up around his name, and because some have worshipped him as God, but by seeing him as he is, by recognizing his greatness, and by making him our friend, our teacher, and our brother; not by surrendering prayer because prayer may lend itself to superstition and pharisaism, but by praying more sincerely, reasonably, and nobly; not by giving up the church because it has sometimes been employed for unworthy ends. but by putting it to the high uses of which it is capable; not by casting aside all religious forms, but by purifying them, and filling them with sincerity and life - shall we be able to make our religion a real evolution, and build up for ourselves and our children a faith better than that of the past.

Evolution teaches us, as no other thought can do, that the past belongs to us, a heritage infinitely rich and precious. But it belongs to us, not as a stream emptying itself into the present as a pool, to stagnate and dry up

and breed disease and die. The past belongs to us as a stream that must flow on through the present into the future, to bless that. If Evolution means receiving from what has been, it no less means contributing to what shall be. It means unselfishness. It means giving. It means making ourselves willingly and joyfully a part of God's eternal order. Evolution means a face set to the future, toward which we press with faith and high purpose. It means believing in some better thing. and forever some better thing, for religion, for man, and for the world; believing in it so earnestly that we shall gladly make ourselves co-workers with God to bring the consummation.

APPENDIX I

THE BATTLE TO DRIVE EVOLU-TION OUT OF THE SCHOOLS

STRENGTH OF THE ANTI-EVOLU-TION FORCES

The widespread character and the amazing strength of the movement to shut out by legislative action all teaching of Evolution from the state-aided universities, colleges, and public schools of the nation, were pointed out in a striking article in the New York *Nation* of May 20, 1925. The following are some of the facts cited in that article.

"In July, 1924, the Rev. George L. Thorpe of Corona, California, and others, petitioned the California State Board of Public Instruction to throw out from the public schools and State-supported colleges all textbooks implying or teaching the theory of Evolution. Did the Board politely but promptly tell Mr. Thorpe to go back where he came from? It did not. More than six months of dillydallying, of playing with this serious matter, have been allowed to pass and so far as we have

been able to obtain knowledge, no decision has yet been reached. The fundamentalist strength is so great in Southern California that there is much fear that this anti-evolutionist movement, in one form or another, under one guise or another will succeed; and thus that the high-school students of the state will be doomed to grow up in ignorance of modern evolutionary science, with all this implies, and the splendid scientific work of the University of California will be ruined or seriously curtailed.

"In Oklahoma, for more than two years it has been impossible to teach the evolution theory in the public schools. Tennessee has just passed a similar law. In Florida the legislature passed a resolution advising school boards or trustees not to employ any instructor who taught Darwinism, and a bill has been introduced making such instruction unlawful. In Texas the Board of Regents of the State University has ordained that 'no infidel, atheist, or agnostic shall be employed in any capacity in the University of Texas.' Although there are, of course, some evolutionists who are atheists, any teacher of evolution, however firm a believer in God he might be, would have hard sledding under the interpretations of such a rule. In Kentucky and Texas the lower house of the legislature passed anti-evolution bills, but the upper house failed to carry the measure in Kentucky by the perilous margin of one vote. The Baptists of Kentucky have voted to give no money to any school teaching Evolution. The North Carolina Board of Education will not employ teachers who believe in Evolution. Bills against the teaching of Evolution are pending or about to be presented in Mississippi, Georgia, West Virginia, Arkansas, Iowa, Illinois, North Dakota, Minnesota, Oregon, and Arizona.

"Throughout the entire South and South-west, fundamentalist and anti-evolutionist feeling is very strong. The Georgia Legislature recently held up an appropriation for maintenance of a State Library on the avowed ground that books on Evolution might be found there. Dr. Henry Fox, Professor of Biology at Mercer University, Macon, Georgia, was forced to resign last October because he was a believer in and taught the theory of Evolution.

"The situation in Tennessee is acute and interesting. Eagerly, fervently, with much outpouring of eloquence, the legislature has decreed that any teacher in any school or college supported in whole or in part by state funds who shall teach 'any theory that denies

the story of the divine creation of man as taught in the Bible, and teaches instead that man has descended from a lower order of animals,' shall be subject to a fine of \$100. Amazing as it seems, this law was enacted without a single protest from men in charge of State Educational Institutions. A few clergymen protested against it, it is good to say; but the State Department of Education was dumb, and there was never a word of protest from the State University.

"Side by side with the effort to prohibit the teaching of Evolution goes the parallel movement to teach the creation story of the Book of Genesis — disguised as the reading of the Bible in the public schools. . . .

"Against the powerfully organized and subsidized fundamentalist and anti-evolutionist groups are ranged two active bodies of protest—the American Association for the Advancement of Science and the Science League of America. The former has appointed a committee which adopted resolutions condemning the fundamentalist attack on science, and reaffirming the faith of scientists in the theory of Evolution.

"The other anti-fundamentalist and proevolution group, the Science League of America, was founded in August, 1924, in San Francisco, for the specific purpose of opposing attacks on the teaching of Evolution, and for the defense of scientific freedom. . . . Although the League is still young and weak, it is already doing good work, and is rapidly growing."

Some of the men at the head of this Science League of America are the following scientists:—

Dr. David Starr Jordan, Chancellor Emeritus, Leland Stanford University; Dr. Harold Heath, Professor of Geology, Leland Stanford University; Dr. H. S. Reed, Professor of Plant Physiology, University of California; Dr. William E. Ritter, Zoologist, University of California; Dr. Edgar L. Hewett, Director, School American Research, Archiological Institute of America; Dr. J. J. See, Astronomer United States Navy; Luther Burbank, eminent Naturalist, originator of new fruits, flowers, etc.; Maynard Shipley, formerly President of the Academy of Science, Seattle, Washington.

In printed circulars sent out widely through the country, the League makes the following statements and calls public attention to the following facts: "No one denies that the Fundamentalist propaganda has resulted, during the past five years, in the practical outlawry of the theory of Evolution as a basis of science teaching in a number of states of the Union.

"A teacher of many years' experience writes: 'I realize the danger of permitting organized theology to dictate the policies or teachings in our public schools; and I have observed with genuine alarm the sinister encroachments of prejudice and religious intolerance. Public-school teachers now hardly dare to have a mind of their own. How can we expect courageous and independent thought from students, if those who teach them dare not think? How can we expect boys and girls to love liberty if those who teach them are mental slaves?"

"An eminent educator writes: 'I find that the publishers have been effectively intimidated by the fundamentalist agitation, for they all are insisting upon high-school textbooks with Evolution left out.'

"Not long ago Professor C. E. Fothergill was compelled to resign his chair in Baylor University, Waco, Texas, because he had told his pupils that Noah's Ark was not large enough to contain a pair of every species of animals on the earth (numbering 500,000).

"Is it no concern of the better educated men and women of the United States that a pall of intellectual darkness is being drawn over the heads of the people at large? Is legal abolishment of freedom of research and teaching in the South and West of no vital interest to the people of the North and East?

"Besides their fervid activities in the Southern States, the fundamentalists are now working intensely in West Virginia, Minnesota, North Dakota, Indiana, Arkansas, Missouri, Arizona, Oregon, and California, and their field of operation constantly grows. Not even the northern seaboard Atlantic States, which feel most safe from this propaganda, are actually so; it must be remembered that a two-thirds majority of the states can ultimately pass an amendment to the Federal Constitution.

"We know that in many states the pro-fundamentalists form a majority of the citizenry. In regard to other states, it should be remembered that on the issue of the Book of Genesis *versus* Evolution—which is of course the real issue—the fundamentalists would be supported silently but systematically at the polls by the Roman Catholic voters; for this Church, as everybody knows, is antagonistic to the theory of transformism as applied to man. Add to these groups many 'plain citizens' who, while more or less indifferent to

theological doctrines, emotionally resent the supposed imputation that they are 'the descendants of monkeys' (the popular conception of Darwinism), and you have a political force to contend with which may well lead to outlawry of freedom of teaching even in states where a more enlightened policy seems, to some observers, to be invulnerable to the attacks of fundamentalist opposition. If the principle is once established that the 'guesses' and 'hypotheses' of ultra orthodox bigots should properly prevail over the findings of scientists and educational experts—as is claimed by the fundamentalists—the culture of the Republic is doomed."

APPENDIX II

TESTIMONIES OF EMINENT SCIEN-TISTS AS TO THE TRUTH OF EVO-LUTION AND ITS REAL RELA-TION TO RELIGION

(A) THE TRUTH AND IMPORTANCE OF EVO-LUTION.

There is no higher scientific authority in this country, if in the world, than the American Association for the Advancement of Science. In view of the widespread misunderstanding of the doctrine of Evolution, and the effort made by ignorance and religious bigotry to convince the American public that it is not true science, but only a mere "guess," and, withal, hostile to religion, the Association deemed it important in 1922 to make a public declaration on the subject. Accordingly, in January, 1923, the Council of the Association published the following statement:

"The Council of the American Association for the Advancement of Science has thought it advisable to take formal action upon this matter, in order that there may be no ground for misunderstanding of the attitude of the Association, which is one of the largest scientific bodies in the world, with a membership of more than 11,000 persons, including the American authorities in all branches of science. The following statements represent the position of the council with regard to the theory of Evolution:

- 1. "The Council of the Association affirms that, so far as the scientific evidences of the evolution of plants and animals and man are concerned, there is no ground whatever for the assertion that these evidences constitute a 'mere guess.' No scientific generalization is more strongly supported by thoroughly tested evidence than is that of Organic Evolution.
- 2. "The Council of the Association affirms that the evidences in favor of the Evolution of Man are sufficient to convince every scientist of note in the world. These evidences are increasing in number and importance every year.
- 3. "The Council also affirms that the theory of Evolution is one of the most potent of the great influences for good that have thus far entered into human experience; it has promoted the progress of knowledge, it has fostered unprejudiced inquiry, and it has served as an invaluable aid in humanity's search for truth in many fields.

4. "The Council of the Association is convinced that any legislation attempting to limit the teaching of any scientific doctrine so well established and so widely accepted by specialists as is the doctrine of Evolution, would be a profound mistake, which could not fail to injure and retard the advancement of knowledge and of human welfare, by denying the freedom of teaching and inquiry which is essential to all progress."

As supplementary to this powerful testimony of the American Association for the Advancement of Science, we add the following testimonies of eminent individual scientists:—

Frederick A. Lucas, Honorary Director of the American Museum of Natural History, New York, is reported in the *New York Times* of March 10, 1924, as saying: "The Evolutionary theory is accepted by all creditable scientists to-day. It underlies all science, all knowledge and all human thought of this age, without an understanding of it one cannot be educated."

Professor John M. Coulter of the University of Chicago is reported to have said before a religious Congress in Chicago on April 28, 1925: "There is no longer any question as to the fact of Evolution. No scientific conclu-

sion can be overthrown by ignorant opposition. Plants and animals have been pedigreed under rigid control and observed in the act of producing new species. It is safe to say that the production of one species from another has been demonstrated repeatedly, so that there is no longer any question as to the fact of Evolution." New York Times, April 29, 1925.

Says Professor Edwin G. Conklin: "Not only the structure but the functions of the human body are fundamentally like those of other animals. We are born, nourished and develop, we reproduce, grow old and die, just as do other mammals. Specific functions of every organ are the same; drugs, diseases, injuries affect man as they do animals, and all the wonderful advances of experimental medicine are founded upon this fact. Development from a fertilized egg to birth goes through the same stages in man and other mammals even to the repeating of gill slits, kidneys, heart and blood vessels like those of fishes and amphibians. Indeed, development from the egg recapitulates some of the main stages of Evolution — in it we see evolution repeated before our eyes. . . All the evidences of evolution drawn from morphology, physiology, embryology, paleontology, homology,

heredity, variation, etc., speak for the evolution of man as much as for that of any other organism. If evolution is true anywhere, it is true also of man. . . . Everything which speaks for the evolution of plants and animals speaks plainly for the evolution of man." Evolution and the Bible, pp 14, 15, 18.

It is not out of place to add the judgment of the New York Times, as expressed editorially on May 24, 1923: "When Mr. Bryan or any one else calls for repudiation of the conception of Evolution, he really calls upon scientific students, teachers, and investigators to throw away their chief tools. He might as well ask them to give up thinking altogether as to give up thinking and inquiring in terms of Evolution. Into every laboratory, every fruitful experiment, every scientific expedition of the past fifty years, the general theory of Evolution has entered as a dominant factor. Scientists do not debate it any more; they instinctively accept it; it is as natural to them as the air they breathe. Without it they would be dazed, and feel that their work had lost direction and utility."

shat's In trouble.

(B) MISAPPREHENSIONS REGARDING EVOLUTION.

Says Professor Edwin G. Conklin: "The

new opponents of Evolution make much of the idea that Evolution is only a hypothesis or as they prefer to call it, a 'guess.' Evolution is a guess only in the same sense as the doctrine of universal gravitation, or any other generalization of science, is a guess. But can one honestly call that doctrine a 'guess' which is supported by all the evidence available, which continually receives additional support from new discoveries, and which is not contradicted by any scientific evidence? It is true that we do not know as much as we would like to know about the causes of Evolution (though we know a good deal more than its opponents assume), but the same may be said with regard to the causes of gravitation, light, electricity, chemical affinities, life or any other natural phenomenon. The problem of cause is never finally solved by science. . . . A common misunderstanding is that man is descended from some existing species of anthropoid ape and the latter from some existing species of monkey and so on back to certain existing species of lower animals. Of course this cannot be true, for the whole organic world has been evolving together. Monkeys, apes, and men have descended from some common but at present extinct ancestor. Existing apes and monkeys are collateral relatives of man but not his ancestors; his cousins but not his parents. . . There has been evolution in divergent lines. The human branch diverged from the anthropoid branch not less than two million years ago, and since that time man has been evolving in the direction represented by existing human races; while the apes have been evolving in the direction represented by existing anthropoids. During all this time men and apes have been growing more unlike; and, conversely, the farther back we go the more we should find them converging, until they meet in a common stock, which should be intermediate between these two stocks. . . Present day apes and monkevs can not become men because they have long since passed the parting of the ways which led to these two different types. . . . The resemblances between monkeys, apes, and man are due to the inheritance of certain common traits which they have derived from a common ancestor, just as the resemblances of cousins are due to the inheritance of traits from common grandparents." Evolution and the Bible, (1922), pp. 7, 8, 11-13.

Professor R. C. Osburn, President of the Ohio Academy of Science, in an address delivered before that body in Columbus on April 14, 1922, is reported to have declared: "There

is some disagreement among scientists as to the method of Evolution. This constitutes one of the many prevalent misconceptions relative to the theory. When some scientists refuse to accept the idea that men descended from the monkey, many persons suppose that thus they renounce belief in Evolution. They do not. They merely refuse to accept one of the many theories relative to the origin of man. All scientists agree as to the fact of Evolution." New York Times, April 15, 1922.

Dr. J. Playfair McMurrick, Professor of Anatomy in the University of Toronto, in his presidential address at the opening of the seventy-fifth meeting of the American Association for the Advancement of Science, in Cincinnati, December 27, 1922, declared that the scientific doctrine of Evolution can never be killed by legislation. He asserts that the doctrine of Evolution has supplied the guiding clue to the flood of new knowledge which has revolutionized life in recent years; most of the modern scientific discoveries applying to human life would never have been made except for the doctrine of Evolution. Continuing he said: "Many make the mistake of supposing that Evolution is wholly identical with Darwinism. The identity is only partial. Evolution as a theory long antedates Darwin.

What Darwin did was to give a convincing explanation of how organic evolution might have occurred. Darwin's is the greatest name in the history of Evolution; but much new knowledge has been obtained since his day, and much that compels scientists to adopt different conclusions from his regarding some matters. But these new conclusions are not repudiations of Evolution. As a fact the evidence in favor of Evolution is many times stronger than it was in Darwin's time, and it seems incredible that man as a reasoning being should presume to doubt as to its validity. Such doubts can be based only on ignorance of the evidence or on unreasoning prejudice."

(C) EVOLUTION AND RELIGION.

Even John Wesley, the founder of Methodism, saw nothing to which he felt any aversion, and nothing that seemed to him inimical to religion, in the thought of man as developed from lower forms of life, even from apes. In his Compendium of Natural Philosophy there is a chapter entitled "A General View of the Gradual Progression of Beings." In this chapter Wesley says: "By what degrees does Nature raise herself to man? . . . How will she rectify this head of the lower animal that is always inclined toward earth? How

change these paws into flexible arms? What method will she make use of to transform these crooked feet into skillful and supple hands? . . . The ape is the rough draft of man, a rude sketch, an imperfect representation, which nevertheless bears a resemblance to man, and is the last creature that seems to display the admirable progression of the works of God. . . . There is a prodigious number of continued links between the most perfect man and the ape."

Why should any follower of Wesley to-day, after reading these words, regard Evolution as atheistical or hostile to religion?

Says Professor Edwin G. Conklin: "Is it any more degrading to hold that man was made through a long line of animal ancestry than to believe that he was made directly from the dust of the ground? Surely the horse and the dog and the monkey belong to higher orders of existence than do the clod and the stone. This lowly origin does not destroy the dignity of man; his real dignity consists not in his origin but in what he is and in what he may become." Evolution and the Bible, (1922), p. 20.

Says Professor Henry Fairfield Osborn: "The moral principle in Evolution is that nothing can be gained in the world without effort.

The ethical principle inherent in evolution is that only the best has a right to survive. The spiritual principle in evolution is the evidence of beauty, order, and design in the daily myriads of miracles to which we owe our existence. Evolution does not take God out of the universe; but, on the contrary, it vastly enlarges our conception of his action."

Says Professor Robert J. Millikan: "There have been just two great influences in the history of the world which have made goodness the outstanding characteristic in the conception of God. The first influence was Jesus of Nazareth; the second influence has been the growth of modern science, and particularly the growth of the theory of Evolution." A Scientist Confesses His Faith, (1923), p. 25.

APPENDIX III

EVOLUTION INTERPRETED. ITS TRUE AND DEEPER MEANING

"That was not first which was spiritual, but that which is natural; and afterward that which is spiritual."

-St. Paul.

I, too, rest in faith
That man's perfection is the crowning flower,
Toward which the urgent sap in life's great tree
Is pressing,—seen in puny blossom now,
But in the world's great morrows to expand
With broadest petals and with deepest glow."

-George Eliot.

* * * * *

"The fossil strata show us that Nature began with rudimental forms, and rose to the more complex as fast as the earth was fit for their dwelling-place; and that the lower perish as the higher appear. Very few of our race can be said to be yet finished men. We still carry sticking to us some remains of the preceding inferior quadruped organizations. We call these millions men; but they are not

yet men. Half-engaged in the soil, pawing to get free, man needs all the music that can be brought to disengage him. If Love, red Love, with tears and joy; if Want with its scourge; if War with its cannonade; if Christianity with charity; if Trade with its money; if Art with its portfolios; if Science with her telegraph through the deeps of space and time, can set his dull nerves throbbing, and by loud taps on the tough chrysalis can break its walls, and let the new creature emerge erect and free — make way and sing paean! The age of the quadruped is to go out — the age of the Brain and the Heart is to come in."—Ralph Waldo Emerson.

* * * * *

"The conviction is steadily gaining ground that the fact of Evolution will have to be accepted. In a scientific age the Genesis story of creation cannot be received as history, but only as poetry or as a dream of early man. There was not, for instance, a certain Monday when there was in all the world, no single sun or moon or shining star, and then a following Tuesday when lo, the sun shone, and the moon gave forth its light, and the heavens were studded with stars. There was not a certain Tuesday when there was, in all the world, no

single tree or flower or blade of grass, and then a following Wednesday when gigantic redwood lifted their branches three hundred feet into the air, and alpine lilies appeared on every mountainside, and grass grew in every valley. There was not a certain Wednesday when there was, in all the seas, no living creature, and then a following Thursday when the waters swarmed with fishes. There was not a certain Thursday when there was, on any continent, no single lion or tiger or woolly rhinoceros, and then a following Friday when animals of every description roamed the forests and appeared upon the plains. There was not a certain Friday when there was, in all the world, no single human being, and then a following Saturday when a full-grown man appeared. Everything that is came from something that was. Everything that was came from something that was before that, and before that, and before that. No man or mountain, no lion or lichen, no fish or flower was ever created outright. Everything has evolved, higher forms of life from lower forms of life, and these lower forms from other forms lower still. That is the belief of increasing numbers of men who have devoted a lifetime to study of the evidence. And so, the conviction grows that however little we may yet know about the origin of species, the fact of evolution will have to be reckoned with by intelligent persons.

"What is the bearing of this fact upon religious faith? I shall venture to suggest not only that man may believe in evolution and still believe in God, but that a convinced evolutionist may find in the conception of evolution a positive support for his religious faith.

"Nothing could be farther from the truth than the suggestion that 'Evolution is an invention whereby it is hoped to get rid of God.' In one of his last letters Darwin himself declared, 'I have never been an atheist in the sense of denying the existence of God'. . . Why should anyone contemplate the fact of Evolution with alarm? Far from banishing or even belittling God, it but adds to his glory. Far from degrading or even diminishing man. it but reveals his uniqueness, his imperishable significance. Far from destroying religion, it fortifies it. And what a mighty stimulus it brings to the most daring hopes of mankind! The hope that though a man die, vet shall he live-how it kindles that! The hope that the dreams of prophetic spirits will yet be realized in a diviner civilization, the kingdom of God -how it lights up that!"-Ernest Fremont Tittle, The Christian Century, June 11, 1925. A fire-mist and a planet,—
A crystal and a cell,—
A jelly fish and a saurian,
And caves where cavemen dwell;
Then a sense of law and beauty,
And a face turned from the clod,—
Some call it Evolution,
Others call it God.

A haze on the far horizon,
The infinite tender sky,
The rich ripe tint of the corn-fields
And the wild geese sailing high,—
And all over the upland and lowland
The charm of the golden rod,—
Some of us call it autumn,
And others call it God.

Like tides on the crescent seabeach,
When the moon is new and thin,
Into our hearts high yearnings,
Come welling and surging in,—
Come from the mystic ocean
Whose rim no foot has trod,—
Some of us call it Longing,
And others call it God.

A picket frozen on duty,—
A mother starved for her brood,—
Socrates drinking the hemlock,
And Jesus on the rood;
And millions who humble and nameless
The straight hard pathway plod,—
Some call it Consecration,
And others call it God.

-William H. Carruth.

He hides within the lily,

A strong and tender Care,
That wins the earth-born atoms
To glory of the air;
He weaves the shining garments
Unceasingly and still,
Along the quiet waters,
In niches of the hill.

O Toiler of the lily,
Thy touch is in the Man!
No leaf that dawns to petal
But hints the angel-plan:
The flower-horizon open,
The blossom vaster shows;
We hear thy wide world echo,
'See how the lily grows!'

Shy yearnings of the savage,
Unfolding, thought by thought,
To holy lives are lifted,
To visions fair are wrought:
The races rise and cluster,
And evils fade and fall,
Till chaos blooms to beauty,
Thy purpose crowning all!

-William C. Gannett.

The One Life thrilled the star-dust through In nebulous masses whirled, Until, globed like a drop of dew, Shone out a new-made world. The One Life on the ocean shore, Through primal ooze and slime, Crept slowly on from less to more Along the ways of time.

The One Life in the jungles old, From lowly, creeping things, Did ever some new form unfold,— Swift feet or soaring wings.

The One Life all the ages through
Pursued its wondrous plan,
Till, as the tree of promise grew,
It blossomed into Man.

The One Life reacheth onward still!

As yet no eye may see

The far-off fact man's dream fulfil,—

The glory yet to be.

-Minot J. Savage.



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